6/3/15 mi

EPA

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e. PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 I D G 1 3 0 0 1 3 11	12 1 5 0 3 0 9 17	18 C	19 S	20 3

Remarks

21 [blank] 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved	
67 6.0 69	70 4	71 F	72 N	73 74	75 80

Section B: Facility Data

Name and Location of Facility Inspected (*For industrial users discharging to POTW, also include POTW name and NPDES permit number*)	Entry Time/Date	Permit Effective Date
Niagara Springs Hatchery - IDFG 2131 Niagara Springs Road ~~Hagerman~~, Idaho ~~83335~~ Wendell 83355 JJ Phone: (208) 536-2283 & Fax: Same (call first)	09:00 - Mar 09, 2015 **Exit Time/Date** 13:05 - Mar 09, 2015	December 1, 2007 **Permit Expiration Date** November 30, 2012 Administratively Extended

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Numbers
Mr. Jerry Chapman, Hatchery Manager II (IDFG) - Operator
Mr. Brian Thompson, Assistant Manager (IDFG) - Assistant Operator
Phone: (208) 536-2283 & Fax: Same (call first)

Other Facility Data (e.g., SIC, NAICS, and other descriptive information) 0921 JJ
SIC = ~~0273~~ (Animal Aquaculture)
NAICS = 112511 (Animal Aquaculture)

Name, Address of Responsible Official/Title/Phone and Fax Number
Mr. Paul Abbott, Idaho Power Company (Owner)
P.O. Box 70
Boise, Idaho 83707
Phone: (208) 388-2353 & Fax: (208) 388-6902

Contacted [X] Yes [ ] No

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

X	Permit	X	Self-Monitoring Program		Pretreatment		MS4
X	Records/Reports		Compliance Schedule		Pollution Prevention		
X	Facility Site Review		Laboratory		Storm Water		
X	Effluent/Receiving Waters	X	Operations & Maintenance		Combined Sewer Overflow		
	Flow Measurement	X	Sludge Handling/Disposal		Sanitary Sewer Overflow		

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes ☐ ☐ ☐ ☐ ☐ (4 rows)

SEV Description

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Dr. Balthasar B. Buhidar, Ph.D.	IDEQ/TFRO/208-736-2190 & 208-736-2194	4/7/2015
Signature of Management QA Reviewer	Agency/Office/Phone and Fax Numbers IDEQ/SO/(208)373-0167/(208)373-0576	Date 9 April 2015

EPA Form 3560-3 (Rev 1-06) Previous editions are obsolete

RECEIVED
JUN - 9 2015
Inspection & Enforcement Management Unit
(IEMU)

ICIS
6-10-15
JJ Brown

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

650 Addison Avenue West, Suite 110 • Twin Falls, Idaho 83301 • (208) 736-2190
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
Curt Fransen, Director

May 20, 2015

Mr. Jerry Chapman, Hatchery Manager
Niagara Springs Hatchery
2131 Niagara Springs Road
Hagerman, Idaho 83335

Subject: Niagara Springs Hatchery, 2015 NPDES Inspection, NPDES Permit IDG-130013

Dear Mr. Chapman:

The Idaho Department of Environmental Quality (DEQ) conducted an inspection of the Niagara Springs Hatchery aquaculture system on March 09, 2015. We appreciate your assistance in evaluating this facility's compliance with National Pollution Discharge Elimination System (NPDES) permit IDG-130013. This permit was issued by the Environmental Protection Agency (EPA) on December 1, 2007, was scheduled to expire on November 30, 2012, but has been administratively extended until the new General Aquaculture Permit is finalized.

DEQ performed this inspection on behalf of EPA. I want to express my appreciation for the cooperation and assistance provided by you and Mr. Brian Thompson during the inspection. My report of the inspection has been completed and submitted to EPA who will make all determinations of permit compliance. If you have any questions, please contact me at (208) 736-2190 or at Balthasar.buhidar@deq.idaho.gov.

Sincerely,

Balthasar B. Buhidar, Ph.D.
Regional Water Quality Manager

BBB: sg

c: Maria Lopez, EPA
AJ Maupin, P.E., DEQ, IPDES Permit Lead
Mary Anne Nelson, Ph. D., DEQ, IPDES Program Manager
Tammarra Golightly, DEQ, State Office

Idaho Department of Environmental Quality
AQUACULTURE FACILITY INSPECTION SURVEY
General NPDES Permit Numbers IDG-130000

Effective: December 1, 2007. Expiration: November 30, 2012
NOI Submission: On or by June 3, 2012 (for next permit cycle)

PURPOSE OF INSPECTION	Determination of compliance with NPDES permit and the Clean Water Act.
TYPE OF INSPECTION	Unannounced Announced CSI **CEI** Recon
DATE(s) OF PREVIOUS NPDES INSPECTIONS	Date: **Dec 15, 2011 (Balthasar Buhidar, IDEQ)** Date: **Jan 16, 2008 (Rob Sharpnack, IDEQ)** Date: **Jun 3, 2003 (Rob Sharpnack, IDEQ)** Date: **Jun 21, 2001 (Carla Fromm, EPA)** Date: **Oct 5, 2000 (Rob Sharpnack, IDEQ)** Date: **Mar 31, 1999 (Rob Sharpnack, IDEQ)** Date: **Apr 15, 1998 (Rob Sharpnack, IDEQ)** Date: **Mar 20, 1997 (Nancy Bowser, IDEQ)** Date: **Mar 20, 1996 (Nancy Bowser, IDEQ)** Date: **Jun 21, 1994 (Nancy Bowser, IDEQ)** Date: **Feb 9, 1993 (Mike Piechowski, IDEQ)**
PENDING OR CURRENT ENFORCEMENT ACTIONS (review NOV and warning letters on file)	**1. No pending or current enforcement actions. Mr. Chapman confirmed this.**
PRIMARY FACILITY NAME	**Niagara Springs Hatchery**
OTHER NAME(S) USED FOR FACILITY	**1. Niagara Springs Fish Hatchery** **2. Niagara Springs Steelhead Hatchery**
NPDES PERMIT #	IDG-130013
FACILITY CONTACT	Name: **Jerry Chapman** Position: **Hatchery Manager II** Phone Number: **(208) 536-2283** Fax Number: **Same as phone but call first** Email: **Niagara@magiclink.com**
FACILITY SIZE (annual fish production; affects frequency of monitoring requirements in parentheses). Confirm production and monitoring frequency during the inspection.	> 500,000 (monthly) **100,000 - 500,000 (quarterly) – Trimester seasonality – 100% steelhead hatchery production** < 100,000 (semi-annual) Other (explain): **The updated NOI (November 15, 2013) indicates 400,000 lbs annual of summer steelhead as the only fishery being reared.**
INSPECTOR(s) AND AFFILIATION	**Dr. Balthasar B. Buhidar, Ph.D.** **Regional Water Quality Manager** **Idaho Department of Environmental Quality** **Twin Falls Regional Office**

IDEQ Additional Personnel	**Michael Brown, Engineering Manager** **Purpose: Take Digital Photos & GPS Locations**
DATE OF INSPECTION	Date: **March 09, 2015** Arrival Time: **09:00 (at the gate entrance)** Arrival Time: **09:10 (at the main office)** Site Visit: **11:35 (facility site tour)** Departure Time: **13:05 (leave the property)**
Photo of facility sign, if any, and facility	
Entrance to Facility off of Niagara Springs Road into Steelhead Lane 	
DATE OF FINAL REPORT	Date: **April 07, 2015**

ENTRY AND PERMIT CONDITIONS REVIEW

X Present your credentials and provide a business card. **Federal NPDES credentials were presented to Mr. Chapman. We conducted the records review in the main office. Mr. Chapman responded to all of the questions.**

OPENING CONFERENCE	
1. Explain the purpose of the inspection and how the inspection will proceed.	Remarks: **Mr. Chapman understood that the CEI was to determine compliance with their NPDES permit and the Clean Water Act.**
2. Review the issuance and expiration dates of the facility's NPDES permit.	Remarks: **IDEQ reviewed the issuance and expirations dates. Mr. Chapman understood these. But at the present time the General Aquaculture Permit has not been issued because it is still undergoing consultation with the USFWS-Boise.**
3. [I.C.3.c.] Explain the NOI and the date of submission prior to the expiration date of the permit (June 3, 2012 – 180 days prior to expiration).	Remarks: **IDEQ reviewed the NOI date. Mr. Chapman understood this and submitted an updated NOI to EPA on November 15, 2013. The original NOI for the 2007-2012 permit cycle was submitted on April 24, 2008.**
4. Explain that the inspection will involve a review of DMRs, QA Plan, BMP Plan, the most recent NOI, Receiving Water Monitoring Report & the Annual Report.	Remarks: **IDEQ explained the CEI process for reviewing qualifying records. Mr. Chapman understood this.**
5. Explain that the inspection will involve a site tour/visit of the facility.	Remarks: **IDEQ explained the CEI process for a site tour/visit of the facility. Mr. Chapman understood this.**
6. Are all necessary personnel present for the inspection?	Remarks: **Yes. Mr. Brian Thompson (Fish Hatchery Assistant Manager) participated in the CEI and responded to a few questions.**
7. Will any chemicals or hazardous chemicals be encountered during the site tour/visit?	Remarks: **Mr. Chapman said that no chemicals or hazardous chemicals would be encountered.**
8. Does the permittee have any questions before proceeding with the inspection?	Remarks: **Mr. Chapman had no questions.**

PRELIMINARY QUESTIONS NOTE: There have been some employee modifications since the previous inspection of 2011. Brian Thompson is now the Fish Hatchery Assistant Manager. And Doug Young is the Fish Culturist.	
1. Obtain representative's name, position, and phone number.	Name: **Jerry Chapman** Position: **Fish Hatchery Manager II** Phone: **(208) 536-2283** Email: **Niagara@magiclink.com**
2. How long has the representative worked for the company?	**Mr. Chapman started work with IDFG in 1985; or 30 years ago.**
3. How long has he/she held the position?	**Mr. Chapman has been the Hatchery Manager II since 1994; or 21 years.**
4. Other representative(s) present for the inspection.	Name: **Brian Thompson** Position: **Fish Hatchery Assistant Manager**

	Phone: **(208) 536-2283** Email: **brian.thompson@idfg.idaho.gov**
NOTICE OF INTENT (NOI)	
NOI Review: Show the interviewee the NOI, and ask him/her to review it for errors. If errors are found, ask him/her to correct the errors and initial the corrections. A new NOI should be submitted if several corrections are made. **Mr. Chapman demonstrated the NOI for the facility.**	
1. What is the date of the most recently submitted NOI?	**The previous NOI was submitted on April 24, 2008. An updated NOI was submitted on November 15, 2013.**
2. Is the NOI complete and current?	**Yes – Mr. Chapman reviewed the NOI and confirmed that it is complete and current.** No
3. Have any structural changes been made to the facility recently?	**Yes – Since the last inspection of 2011, the facility has undergone a renovation beginning on March 12, 2012 and continuing through the Fall 2013. A discussion of some of the renovation changes is found in Exhibit B.** No
4. Any structural changes anticipated? (Plan and Spec review required of IDEQ, if so; see page 47; Part VI.I.2.)	Yes **No – No additional structural changes are anticipated after the renovation that occurred between March 12, 2012 and the Fall 2013. The facility provided to IDEQ the necessary documentation and plans & specifications for an Idaho Code 39-118 Review.**
FACILITY LOCATION, ETC. (see NOI)	Address: **2131 Niagara Springs Road** **Wendell, Idaho 83355** Phone: **(208) 536-2283** Fax: **(208) 536-5137** Email: **Niagara@magiclink.com**
OWNER NAME	**Idaho Power Company** **c/o Paul Abbott, Fish Biologist**
OWNER ADDRESS	Address: **P.O. Box 70** **Boise, Idaho 83707** Phone Number: **(208) 388-2353** Fax: **(208) 388-6902** E-mail: **pabbott@idahopower.com**
OPERATOR NAME	**Idaho Department of Fish & Game** **c/o Jerry Chapman, Fish Hatchery Manager II**
OPERATOR ADDRESS	Address: **2131 Niagara Springs Road** **Wendell, Idaho 83355** Phone Number: **(208) 536-2283** Fax: **(208) 536-5137** E-mail: **Niagara@magiclink.com**
PERMIT TRANSFERS 1. Is this a new operator?	Yes **No – Mr. Chapman confirmed that there has been no permit transfer.**
If new, review the following: According to VII. I. "Transfers. Authorization to discharge under this permit may be automatically transferred to a new permittee on the date specified in the agreement only if: 1. The current permittee notifies the Director of the Office of Water and Watersheds at least 30 days in advance of the proposed transfer date;	

2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility and liability between them; and 3. The Director does not notify the existing permittee and the new permittees of its intent to revoke and reissue the authorization to discharge.	
2. Was EPA and IDEQ notified in writing of the transfer?	☐Yes ☐N/A – No permit transfer. ☐No
LOCATION OF FACILITY Previous GPS: **Garmin GPS** Latitude: N **42.66436558° (decimal degrees)** Longitude: W **-114.67628287° (decimal degrees)** Date: **December 15, 2011** Time: **09:00** Count: **7 of 11 bars (± 10 feet)**	GPS taken at entrance to facility: Latitude: N **42.66439°** Longitude: W **114.67626°** Date: **March 09, 2015** Time: **09:00** Count: **8 of 13 bars (± 10 feet)**
	Google Earth GPS at entrance to facility: Latitude: N **42° 39' 51.56"** Longitude: W **114° 40' 34.27"** Elevation: **3047 feet** Date: **March 11, 2015 (IDEQ-TFRO)**
AUTHORIZATION TO DISCHARGE NOTE: At the present time the General Aquaculture Permit is undergoing USFWS ESA Consultation; and this has been occurring since its expiration in 2012. It is anticipated that the GAP will undergo public comment in 2015.	
1. Did you receive a letter authorizing you to discharge?	**Yes – Mr. Chapman demonstrated the EPA authorization letter previously, dated November 5, 2007. DEQ has a copy of this authorization.** No
2. "Addressee" on the authorization to discharge letter: 3. Is this correct?	Name: **Tom Frew, IDFG (retired)** **P.O. Box 25** **Boise, Idaho 83707** Yes **No: name Gary Byrne (Current)** **State Hatchery Manager** **P.O. Box 25** **Boise, Idaho 83707** **And Jeff Heindel** **State Production Manager** **P.O. Box 25** **Boise, Idaho 83707**
4. Do you have a copy of the permit?	**Yes – Mr. Chapman demonstrated a copy of the permit.** No
5. Is the facility currently discharging?	**Yes – Mr. Chapman confirmed this.** No
6. Was the facility containing, growing or holding fish on December 1, 2007 (effective date of the permit)?	**Yes – Mr. Chapman confirmed this.** No
7. If not currently discharging, when do you expect to	**N/A**

rear fish again at this facility?	Date:
8. [II.A.1. & 2. (p 10)]Do you plan to participate in Pollutant Trading?	**Yes – Mr. Chapman confirmed this although he wasn't certain how IDFG would participate in it.** No
PROHIBITED DISCHARGES	
Part II.B., Page 29. Review the prohibited discharges 1 & 2 (a-h) with the interviewee. **COMPLETE – Mr. Brian Thompson read this Part in the permit and concurred that he understood it.**	
1. Have you had any such prohibited discharges that you know of since December 1, 2007?	Yes **No – Mr. Thompson confirmed this in Mr. Chapman's presence.**
2. Do you expect to have any difficulty prohibiting such discharges from this facility?	Yes **No – Mr. Thompson confirmed this in Mr. Chapman's presence.**
Questions or Comments: **Mr. Chapman & Mr. Thompson had no questions.**	
PROHIBITED PRACTICES	
Part II.C., Pages 29-30. Review the prohibited practices 1 – 2 with the interviewee. **COMPLETE – Mr. Brian Thompson read this Part in the permit and concurred that he understood it.**	
1. Have you or any other employee engaged in any of these prohibited practices that you know of since December 1, 2007?	Yes **No – Mr. Thompson confirmed this in Mr. Chapman's presence.**
2. Do you expect to have any difficulty prohibiting such practices at this facility?	Yes **No – Mr. Thompson confirmed this in Mr. Chapman's presence.**
Questions or Comments: **Mr. Chapman or Mr. Thompson had no questions.**	
DMR – FACILITY MONITORING REQUIREMENTS	
Part II.D., (see page 30-33). Ask to see the recent DMRs and raw data. Review to determine if the permittee is filling in the correct data (influent, effluent raw data, and effluent net). See page 30, II. D. 2. b., for requirement when data are less than MDL. According to II. D., "The permittee shall monitor discharges from all outfalls authorized under the permit as specified in Tables 12 and 13…" (see pages 30-33) For frequency requirements, see footnote 16 of Table 12, and footnote 29 of Table 13 for OLSBs) – **IDEQ did a summary review of the DMRs prior to the CEI from January 2007 through January 2015. See Exhibit A for additional question asked. Mr. Chapman demonstrated the DMRs on-site from January 2007 through January 2015. The facility monitored in February for flow and nutrients; in March 2015 for flow; and these were submitted to EPA & IDEQ. See Exhibit A.**	
1. When was the last monitoring event?	**February 2015 for flow and nutrients; March 2015 for flow. These were submitted to EPA and IDEQ.**
2. Who conducted the monitoring?	**Mr. Thompson conducted the monitoring. The previous person (Kevin Kincaid) was transferred to another IDFG facility.**
3. Is this the person who usually conducts the monitoring?	**Yes – Mr. Chapman confirmed this.** No
4. Who fills out the DMRs?	**Mr. Thompson fills out the DMRs. Mr. Chapman reviews the DMRs for accuracy.**
5. When was the most recent DMR submitted to EPA and IDEQ?	**March 2011. It was sent recently.**
6. [II.D.1.] Do you monitor discharges from all outfalls	**Yes – Mr. Chapman stated that the facility**

authorized under this permit as specified in Table 12 (p 31) (Raceways and FFSBs) and Table 13 (p 32) (OLSBs)?	**has two discharges: one (1) outfall to Niagara Springs Creek and one (1) diversion to Rim View Trout Farm.** No
7. [II.D.2.a.] Do you use methods that can achieve MDLs less than or equal to those specified in Table 15 (p 34)?	**Yes – Mr. Chapman confirmed that the MDLs are achieved through Rangens Research Lab.** No
8. [II.D.2.b.] For purposes of reporting on the DMR, do you comply with Appendix D, 4?	**Yes – Mr. Chapman confirmed this.** No
9. Influent Water Sources – Niagara Springs Creek **NOTE: In the historical records at IDEQ-TFRO there is reference to Niagara Springs #1 and Niagara Springs #2 as diversions from Niagara Springs to the facility. This reference is to the same spring source (Niagara Spring) that is diverted through #1 (concrete pipeline to the splitter box and then to the outside raceways) and #2 (to the hatchery building). Since the construction remodeling in 2012-2013, the #2 diversion (which used to be an 8" pipeline) is not a cement diversion box from the Rim View Canal (which takes water from Niagara Springs to Rim View Fish Hatchery) to the Filter Building and then to the Hatchery Building and Niagara Springs Creek.**	
a. How many influent sources?	**Mr. Chapman confirmed that there is only one spring influent source (Niagara Springs) to the facility, but it comes via two inputs: (1) "below the bridge" and (2) "up on the hill at the top of the springs."**
b. Are all influent sources monitored for flow?	**Yes – Mr. Chapman confirmed this. Flow monitoring is done once per month and reported to EPA & IDEQ.** No
c. Are all influent sources monitored for WQ parameters?	**Yes – Mr. Chapman confirmed this as quarterly monitoring. The influent monitoring location is at the Raceways influent location near Raceway #1. The location was approved by EPA and IDEQ.** No
d. Are all influent sources combined into one sample to determine flow and/or WQ parameters?	Yes **No – Mr. Chapman explained that there is only one influent water source and it is Niagara Springs. No other sources exist for this facility.**
10. Raceways and FFSBs Discharges [II.D.3] (Table 12, p 31) **Mr. Chapman confirmed that the facility has nineteen (19) outside raceways and two (2) FFSBs (West and East separated by a common walkway).**	
a. [II.D.3.a.] Timing: Are all influent and effluent samples and flow measurements taken on the same day?	**Yes – Mr. Chapman confirmed that the samples are taken within a 24 hour cycle between 8:00 am (Day 1) and 8:00 am (Day 2).** No
b. [II.D.3.b] Timing: If your facility has multiple	**Yes – Mr. Chapman confirmed that the**

effluent discharge points and/or influent points, do you composite samples from all points proportionally to their respective flow?	**facility has only one effluent outfall, one effluent diversion, and one influent source.** No
c. [II.D.e.b.] Location: Are effluent samples from the effluent stream collected just prior to discharge into the receiving waters?	**Yes – Mr. Chapman confirmed this.** No
d. [II.D.e.b.] Location: If the effluent stream mixes with other flows, do you collect effluent samples from the effluent stream just prior to discharge into receiving waters?	**Yes – Mr. Chapman confirmed this.** No
e. [II.D.e.b.] Location: If the facility with raceways discharges to a FFSB(s), do you collect effluent samples from the FFSB(s) just prior to discharge into the receiving waters?	**Yes – Mr. Chapman confirmed this. Other than influent samples, no samples are taken prior to the FFSB. But sampling is also done prior to discharging from the FFSB into Niagara Springs Creek.** No
f. [II.D.3.c.] Small discharges: Does the facility have small discharges that comprise less than 1% of the total raceway flows?	**Yes – Mr. Chapman confirmed this.** No
g. [II.D.3.c.] Small discharges: Are the flows of these small discharges monitored at a minimum of once per year?	**Yes – Mr. Chapman confirmed this.** No
NOTE: Letters associated with the Annual Report of Progress indicate that the small discharges account for less than 1% of the total raceway flows. For example, May 01, 2013 Letter = 0.96% of total flow; May 09, 2012 Letter = 0.96%; October 26, 2012 Letter = 0.42%; May 12, 2014 Letter = 0.33%; and, October 29, 2014 Letter = 0.33%.	
h. [Table 12, p 31, Footnote 17] What is the interval of discrete sampling for the composite sample? (The permit requires four or more discrete samples taken at one-half hour intervals or greater in a 24 hour period.)	**Mr. Chapman confirmed that the interval is every hour over a 24 hour period using a Sigma 900 Auto Sampler.**
i. [Table 12, p 31, Footnote 17] When sampling raceway discharge, is at least one sample taken during ~~quiescent zone or~~ raceway cleaning? ("at least ¼ of the samples")	**Yes– Mr. Chapman confirmed this.** No
If not, why not? **Mr. Chapman confirmed that the facility does NOT have quiescent zones (QZs). Sampling occurs when raceways are cleaned. At least ¼ of the samples are taken when the raceways are cleaned.**	
j. [Table 12, p 32, Footnote 17] What types of samples are taken for influent? (permittees with spring influents may elect to take grabs, page 32, footnote 17)	**Mr. Chapman confirmed that influent samples are taken like effluent samples.**
k. How and where is flow measured for the raceways? And by whom? **NOTE: Mr. Chapman confirmed two other flow measuring devices: (1) Ultra Sound Meter at the effluent pipe to Niagara Springs Creek; and, (2) a calibrated staff gage at the diversion to Rim View Trout Farm. They also do comparison calculations on the influent total water minus the effluent total water diverted as a check against the staff**	**Mr. Chapman confirmed that raceways' flow is measured by what he calls an Annubar intake pipe meter using differential pressure; and recorded in the main office.**

gage.	
l. [Table 12, p 31, Footnote 14] Is this flow measurement method one of those specified in Appendix E. Part I.A. (p 79)?	Yes **No – This is not one of the methods in Appendix E, but the IDWR has approved it as acceptable for this facility.**
m. [Table 12, p 32, Footnote 18] Are all influent and effluent samples and flow measurements taken on the same day?	**Yes – Mr. Chapman confirmed this.** No
n. [Table 12, p 31, Footnote 15] Is flow measurement taken concurrently with each pollutant sampling, when applicable, once for every composite sample? Or is it taken on either the influent or effluent as long as the measurement at that location accurately reflects the discharge flow to the receiving water?	**Yes – Mr. Chapman confirmed that the flows are taken at the same time when sampling occurs.** No Yes No **N/A –Mr. Chapman confirmed this.**
11. How is the flow measuring device calibrated? And by whom?	**Mr. Chapman confirmed that flow measurements are calibrated once per year by Idaho Power Company.**
12. OLSBs Monitoring Measurements [II.D.4.]: **NOTE: Mr. Chapman confirmed that the facility has one (1) inactive OLSB. It is used twice a year when the FFSBs are being cleaned out. During its use, the OLSB decants wastewater from the FFSB, which allows the clean decanted wastewater into the Snake River. It functions like a "polishing pond" for tertiary treatment. Historically it functioned as an OLSB, but no longer since the 2 FFSBs serve to clean the wastewater.**	
a. [II.D.4.] Does the facility collect effluent samples from the effluent stream just prior to discharge into the receiving waters?	**Yes – Mr. Chapman confirmed that the EPA has approved that the facility monitor only for flow during the discharge from the OLSB.** No
b. [Table 13, p 32, Footnote 25] Are OLSB influent and effluent samples collected during quiescent zone cleaning?	Yes **No – Mr. Chapman explained that the facility does not have any QZs; and therefore, does not monitor influent & effluent samples.**
c. How and where is flow measured for the OLSBs? And by whom?	**Mr. Thompson & Mr. Chapman are responsible for doing the flow measurements. If a discharge occurred from the OLSB, it would be over the top of the dam boards.**
d. [Table 13, p 32, Footnote 27] Is the flow measurement one of those specified in Appendix E.I.A.?	**Yes – Mr. Chapman confirmed this.** No
e. [Table 13, p 33, Footnote 28] For OLSB effluent or influent, are flow measurements taken concurrently with pollutant sampling, when applicable? Or is it taken on either OLSB influent or effluent as long as the measurement at that location accurately reflects the discharge flow to the receiving water?	Yes **No – Mr. Chapman confirmed this.** **Yes – Mr. Chapman confirmed this.** No
f. [Table 13, p 33, Footnote 30] Does the facility	**Yes – Mr. Chapman confirmed this.**

monitor for composite samples? If so, does the composite sample represent 4 or more discrete samples taken at ½ hour intervals or greater in a 24-hour period? Do the composite samples represent multiple effluent discharge points and/or influent points as same day samples from all point proportionally to their respective flows?	No **Yes – Mr. Chapman confirmed this.** No **Yes – Mr. Chapman confirmed this.** No
g. How and where is flow measured for the OLSBs? And by whom?	**Mr. Chapman confirmed that the flow is measured at the bottom end of the OLSB. He stated that this would be done twice per year (Spring and Fall) when the FFSBs are being cleaned out, and if the OLSB is discharging the decanted FFSB water into the Snake River.** **Mr. Thompson & Mr. Chapman confirmed that they are in charge of doing the flow measurements.**
h. How is the flow measuring device calibrated? And by whom?	**Mr. Chapman explained that the OLSB does not have a flow measuring device; but there is staff gauge that is associated with a calibration chart that equates discharge (flow) per foot.** **N/A**
i. [Table 12, p 31, Footnote 16] What is monitoring frequency of the OLSBs?	**Mr. Chapman confirmed that monitoring is done only if there is a discharge into the Snake River. So this could be once or twice per year.**
k. [Table 12, p 31, Footnote 18] Are all influent and effluent samples and flow measurements taken on the same day?	**Yes – Mr. Chapman confirmed this.** No
l. [Table 12, p 32, Footnote 20] Does the facility monitor for temperature?	Yes **No – Mr. Chapman confirmed that temperature monitoring is not required by the permit.**
m. [Table 12, p 32, Footnote 21] Does the facility monitor for copper?	Yes **No – Mr. Chapman confirmed that the facility does NOT monitor for copper because it does NOT use copper products.**
13. [Table 12, p 32, Footnote 19] Was net effluent load recorded on the DMR calculated correctly? (check a few DMRs; see Appendix D, page 75 for equations)	**Yes – In general, the net effluent load was recorded correctly. See Exhibit A for additional information for a review of the net values from 2007 through 2015.**

	No
14. Are you aware of any recent violations of the permit limits? What was the limit that was exceeded? Date of the exceedance.	Yes **No – Mr. Chapman confirmed that there are no recent violations of the permit.** **N/A** **N/A**
15. Are the data reported properly on the DMRs?	**Yes – Mr. Chapman confirmed that the data are reported properly on the DMRs. See Exhibit A for additional information.** No
16. Are DMR data consistent with analytical results?	**Yes – Mr. Chapman confirmed this. IDEQ confirmed that the reported laboratory data is consistent with the DMR reporting from January 2007 through January 2015.** No

RECEIVING WATER MONITORING

NOTE: Mr. Chapman confirmed that the facility discharges directly to Niagara Springs Creek via its effluent outfall.

Part II. E., (see pages 33-35). According to II.C.1., "All permittees with OLSB that discharge directly to receiving water must conduct receiving water monitoring for ammonia, pH, and temperature upstream from the outfall." **Mr. Chapman confirmed that the OLSB discharges to the Snake River only twice per year when the FFSBs are being cleaned out in the Spring and Fall. Additionally, the FFSBs divert a portion of their wastewater to the Rim View Trout Farm.**

And 2, "All facilities using chelated copper compounds or copper sulfate must monitor total recoverable copper and hardness immediately upstream of the outfall at least once in any quarter when these compounds are applied..." **Mr. Chapman confirmed that the facility does NOT use copper products.**

Ask to see the QA Plan which will describe where the samples are taken in the receiving stream. **Mr. Chapman produced a QA Plan that indicated the monitoring locations on the facility. But the QA Plan did not indicate any receiving stream monitoring because the facility is not required to do surface water monitoring.**

1. [II.E.1.] Does the facility have an OLSB discharging to a receiving stream?	**Yes – Mr. Chapman confirmed this as a historical OLSB that only functions twice per year when the FFSBs are being cleaned out.** No
If so, are you monitoring receiving water for ammonia, pH, and temperature upstream from the outfall?	Yes **No – Mr. Chapman confirmed that NO receiving water monitoring is done per EPA approval.**
2. [II.E.2.] Does the facility use chelated copper compounds or copper sulfate?	Yes **No – Mr. Chapman confirmed that the facility does NOT use copper products.**
If so, are you monitoring receiving water for total recoverable copper and hardness immediately upstream of the outfall in any quarter?	Yes **No – Mr. Chapman confirmed that the facility does not use copper projects.** N/A

3. [II.E.3.] Are receiving water samples grab samples and are they collected during the time when effluent composite samples are being collected for the same parameters?	Yes **No – Mr. Chapman confirmed that no surface water monitoring is required.**
4. [II.E.4.] Are receiving water samples analyzed using EPA approved methods capable of achieving method detection limits (MDLs) that are equivalent to or less than those listed in Table 15 (Permit, p 34)?	Yes **No – Mr. Chapman confirmed that no surface water monitoring is required.**
5. [II.E.5.]Are you submitting the results to EPA and IDEQ with the DMRs?	Yes **No – Mr. Chapman confirmed that no surface water monitoring is required.**
6. [II.E.6.] Are receiving water monitoring results submitted to EPA with copies to IDEQ with the DMRs for the month when the monitoring is conducted? Does the DMR report include all information required in Part V.E. and a summary and evaluation of the analytical results, including a short discussion of the accuracy and precision of the data, any problems with sample collection or analysis that may have affected the results, or what conditions existed at the time of the sample collection that may be relevant to how representative the data may be of the normal conditions at that site?	Yes **No – Mr. Chapman confirmed that no surface water monitoring is required.**
7. [II.E.7.] Is quality assurance/quality control plans (QAQC plans) for all the monitoring, documented in the QA Plan required under Part II.F (Quality Assurance Plan)?	Yes **No – Mr. Chapman confirmed that no surface water monitoring is required.**
QUALITY ASSURANCE PLAN (QA PLAN)	
Part II. F., (see page 35). According to II.F. "The permittee must develop a QA plan for all monitoring required by this permit. The plan must be developed and implemented within 60 days of coverage under this permit." **Mr. Chapman demonstrated a copy of their most recent QA Plan which is kept on-site in the main office. It was updated on January 15, 2015.**	
1. [II.F.] Do you have a QA plan?	**Yes – Mr. Chapman confirmed this by demonstrating the facility's plan of January 08, 2015.** No
2. [II.F.] When did you submit the certification (Appendix F) that a plan has been developed and is being implemented?	**Mr. Chapman confirmed this with the certification of January 08, 2015.**
3. [II.F.1.] Is the QA Plan designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur?	**Yes – Mr. Chapman confirmed this.** No
4. [II.F.2.] During all sample collection and analysis activities, does the permittee use the EPA-approved quality assurance and quality control (QA/QC) and chain-of-custody procedures described in EPA/QA/R-5 and EPA/QA/G-5?	**Yes – Mr. Chapman confirmed this. IDEQ previously confirmed that the facility regularly submits their chain-of-custody as part of their DMR reporting.** No
5. [II.F.2.] Is the QA Plan prepared in the format that is	**Yes – Mr. Chapman previously confirmed**

specified in EPA/QA/R-5 and EPA/QA/G-5?	**this. A current review by IDEQ of the QA Plan confirmed this.** No
6. [II.F.3.a)] Does the QA Plan include: details on the number of samples, type of sample containers, preservation of samples including temperature requirements, holding times, analytical methods, analytical detection and quantification limits for each parameter, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements?	**Yes – Mr. Chapman confirmed this.** No If not, what is missing? **IDEQ reviewed the QA Plan and confirmed that the QA Plan contains the required details.**
7. [II.F.3.b)] Does the QA Plan must include: description of flow measuring devices or methods used to measure influent and/or effluent flow at each point, calibration procedures, and calculations used to convert to flow units. If a permittee's facility has multiple effluent discharge points and/or influent points, it must describe its method of compositing samples from all points proportionally to their respective flows?	**Yes – Mr. Chapman confirmed this.** No If not, what is missing? **Mr. Chapman confirmed that the facility's QA Plan contains the required elements.**
8. [II.F.3.b. (1)] If you elected to take grab samples of influents, does the plan provide evidence of insignificant variability among influent sources?	Yes **No – This is not applicable. Mr. Chapman confirmed that the facility takes composite samples using an SO 900 auto sampler. No manual grab samples are taken.**
9. [II.F.3.b.(2)] If you elected to not monitor small discharges that comprise less than 1% of the total raceway flows, does the plan provide justification that effluent quality of these discharges is the same as monitored discharges?	**Yes – Mr. Chapman confirmed this. However, letters associated with the Annual Report of Progress indicate that the small discharges that account for less than 1% of the total raceway flows were sampled: May 01, 2013 Letter = 0.96% of total flow; May 09, 2012 Letter = 0.96%; October 26, 2012 Letter = 0.42%; May 12, 2014 Letter = 0.33%; and, October 29, 2014 Letter = 0.33%.** No
8. [II.F.3.c.] Does the QA Plan include a map(s) of sampling points, including receiving water sampling locations and justification for the choice of the sampling?	**Yes – Mr. Chapman confirmed this. IDEQ confirmed this also in reviewing the QA Plan on-site.** No
11. [II.F.3.c.] Does the QA Plan have a location of the small discharges that comprise less than 1% of the total raceway flows?	**Yes – Mr. Chapman confirmed this.** No
12. [II.F.4.d.] Does the QA Plan include qualifications and trainings of personnel?	**Yes – Mr. Chapman confirmed this. IDEQ confirmed this also in reviewing the QA Plan on-site with updated employee qualifications and annual trainings.**

	No
13. [II.F.4.e.] Does the QA Plan include the laboratory name and telephone number?	**Yes – Mr. Chapman confirmed this. He stated that Rangens Lab is still their lab of choice. He has no concerns with the laboratory results.** No
14. [II.F.5.] Are copies of the QA Plan kept on site and made available to EPA and IDEQ upon request? If lack of suitable storage area makes on-site storage impossible, is he QA Plan kept in the possession of staff whenever they are working on-site?	**Yes – Mr. Chapman confirmed this.** No Yes No **N/A – Mr. Chapman confirmed this.**
15. Is facility following / using the QA Plan?	**Yes – Mr. Chapman confirmed that the facility is using the QA Plan.** No
BEST MANAGEMENT PRACTICES PLAN (BMP PLAN)	
Part III (see page 36). According to Part III.C., "the permittee must develop and implement a BMP Plan which meets the specific requirements listed in Part III.E. **Mr. Chapman demonstrated an updated copy of the facility's BMP Plan of January 08, 2015 which is kept on-site in the main office.**	
1. Do you have a BMP plan? If not on site, is it in the possession of staff when they are working on-site?	**Yes – Mr. Chapman confirmed this with a copy of the BMP Plan, dated January 08, 2015.** No Yes No **N/A – Mr. Chapman confirmed this.**
2. When did you submit the certification (Appendix F) that a plan has been developed?	**Mr. Chapman confirmed this with a copy of the certification, dated January 08, 2015.**
3. Chemical Storage a. ensure proper storage to prevent spills, b. implement procedures for proper containing, cleaning and disposing of spilled material.	**Yes – Mr. Chapman confirmed this. He also stated that they have 2 areas for chemical storage; but right now only one is housing some of their oil products. The other one is empty.** No **Yes – Mr. Chapman confirmed this.** No
4. Structural Maintenance a. routinely inspect rearing and holding units and waste collection containment to indentify and promptly repair damage, How often?	**Yes – Mr. Chapman confirmed this.** No **Mr. Chapman confirmed that the FFSBs and the OLSB are inspected at least twice per year.**

b. regularly conduct maintenance of rearing and holding units and waste collection and containment systems to ensure their proper function	**Yes – Mr. Chapman confirmed this.** No
5. Training Requirements: a. Train personnel in spill prevention and clean-up and disposal of spilled materials. b. Train personnel on proper structural inspection and maintenance of rearing and holding units and waste collection and containment systems.	 **Yes – Mr. Chapman confirmed this.** No **Yes – Mr. Chapman confirmed this.** No
6. Operational Requirements: a. Water which is disinfected with chlorine or other chemicals must be treated before it is discharged to waters of the U.S.	 **Yes – Mr. Chapman confirmed this. See Note that follows for fuller explanation.** No
b. Treatment equipment used to control the discharge of floating, suspended or submerged matter must be cleaned and maintained at a frequency sufficient to prevent overflow or bypass of the treatment unit by floating, suspended, or submerged matter.	**Yes – Mr. Chapman confirmed this.** No
c. Procedures must be implemented to prevent fish from entering quiescent zones, full-flow and off-line settling basins. Fish which have entered quiescent zones or basins must be removed as soon as practicable.	**Yes – Mr. Chapman confirmed this.** No
d. All drugs and pesticides must be used in accordance with applicable label directions (FIFRA or FDA).	**Yes – Mr. Chapman confirmed this.** No
e. Chelated copper compounds and copper sulfate, when used, must be applied to only one raceway at a time.	Yes **No – Mr. Chapman confirmed that no copper products are used on the facility.**
f. Identify and implement procedures to collect, store, and dispose of wastes, such as biological wastes, in accordance with IDAPA §02.04.17 and IDAPA §58.01.02. Such wastes include fish mortalities and other processing solid wastes from aquaculture.	**Yes – Mr. Chapman confirmed this.** No
g. Implement procedures to control the release of transgenic or non-native fish or their diseases as specified in any permit(s) issued by the Idaho Department of Fish and Game for the importation, transportation, release or sale of such species, in accordance with IDAPA §13.01.10.100.	**Yes – Mr. Chapman confirmed this.** No

h. Implement procedures to eliminate the release of PCBs from any known sources in the facility, including paint, caulk, or feed.	Yes **No – Mr. Chapman confirmed that no PCBs have been used on the facility.**
NOTE: Relative to item 6.a. above, Mr. Chapman stated that the facility uses chlorinate. In order to confirm with more detail, DEQ (Buhidar) called Jerry Chapman on March 23, 2015 (13:41-13:43) and got the flowing clarification. Two types of cleaning are conducted. First, the raceway screens are pulled out and placed in a 16' vat with chlorine and are left to sit overnight. The next day the screens are taken out and dried in the sun and stacked before being returned to the raceways for use. Sodium Thiosulfate is added to the vat to neutralize the chlorine; and later taken to the grassy lawn where it is spread without discharging into Niagara Springs Creek or the Snake River. Second, an Idaho Power Company tanker truck that is used to transport Salmon is brought in and cleaned out via chlorination. Sodium thiosulfate is added to the tank to neutralize the chlorine; and "slushed" around for mixing. Once sufficient contact time is established in the tank, the tanker truck drives over to their grass lawn and spreads it over the lawn. No discharge is allowed to occur into Niagara Springs Creek or the Snake River.	
When was the BMP Plan updated recently?	**Mr. Chapman confirmed this with a copy of the most recent update, dated January 08, 2015.**
AQUACULTURE SPECIFIC REPORTING REQUIREMENTS (Part IV., Page 38)	
A. Drug And Other Chemical Use And Reporting Requirements (see pages 38-39)	
1. Do you use drugs, pesticides or other chemicals?	☐**Yes – Mr. Chapman confirmed this.** ☐No
If yes, ask to see the Chemical Log Sheet. (see Appendix G, page 91) **NOTE: IDEQ reviewed the log sheet for January-November 2014 and appeared to visibly conform to Appendix G of the permit. See Exhibit B of drugs, disinfectants and other chemicals used on the facility that was reviewed by IDEQ for this inspection.**	
2. Are records being maintained of all applications?	☐**Yes – Mr. Chapman confirmed this.** ☐No
3. When an INAD or extralabel drug is used for the first time, you are required to report this orally and in writing to EPA and IDEQ.	**Mr. Chapman confirmed that he understands the reporting requirements.**
Have you used INADs or plan to use INADs or extra label drugs?	**Yes – Mr. Chapman confirmed the use of INADs in 2008.** No
If so, have you written to EPA and IDEQ that you have signed up to use an INAD or prescription? (page 88)	**Yes – Mr. Chapman confirmed this.** Date: **2008** No
Have you provided an oral report to EPA and IDEQ of an INAD or prescription use? (page 87)	**Yes – Mr. Chapman confirmed this.** Date: **2007 when permit was issued** No
Have you provided a written report to EPA and IDEQ of an INAD or prescription use? (page 89)	**Yes** Date: **2007 and/or 2008** No
B. Structural Failure (see page 39) Remind the interviewee of this new requirement:	

Failure or damage to the facility must be reported to EPA and IDEQ orally within 24 hours and in writing within five days when there is a resulting discharge of pollutants to waters of the U.S.	Confirmed? **Mr. Chapman confirmed that he understands this requirement.** **X Yes** No
C. Spills of feed, drugs, pesticides or other chemicals (see page 39) Remind the interviewee of this new requirement: The permittee must monitor and report to EPA and IDEQ any spills that result in a discharge to waters of the United States; these must be reported orally within 24 hours and in writing within five days.	Confirmed? **Mr. Chapman confirmed that he understands this requirement.** **X Yes** No
D. Annual Report of Operations (see page 40) Remind the interviewee of this requirement: The permittee must prepare and submit an annual report of operations by January 20th of each year to EPA and IDEQ. (see Appendix H, page 95-96 for form)	Confirmed? **Mr. Chapman confirmed that he understands this requirement.** **X Yes** No
1. Did you submit the last report as required?	**Yes – Mr. Chapman confirmed this.** No
2. Is the annual report complete? (Check the report against the required elements on pages 95-96.)	**Yes – Mr. Chapman confirmed that the Annual Report of Operations (ARoO) is on-site and complete. IDEQ reviewed the annual reports from 2011 through 2014:** **ARoO-2011: January 18, 2012** **ARoO-2012: January 14, 2013** **ARoO-2013: January 09, 2014** **ARoO-2014: January 12, 2014** No
Ask to see the annual logs of production. 3. Are the logs consistent with what is reported in the annual report?	**IDEQ reviewed production logs for 2011-2014that were in a folder for the previous 5 years2014.** **Yes – Mr. Chapman confirmed this.** No
4. Was the facility able to provide all the required paper documentation requested?	**Yes –IDEQ reviewed all necessary paper documentation.** No

FACILITY PHYSICAL INSPECTION – SITE TOUR

Objectives of the facility inspection include: identifying all discharges to the surface waters from the facility; observing and recording prohibited discharges or practices; and noting any problems. Many of these questions are subjective. **IDEQ did a site tour of the facility with Mr. Chapman of the following:**

(1) Front Entrance
(2) Niagara Springs Source Water
(3) Rim View Canal
(4) Intake/Diversion Structure to Hatchery Building From Rim View Canal
(5) Filter Building
(6) Influent Traveling Screen on Influent Pipeline to Outside Raceways
(7) Splitter Box
(8) UV Room in Hatchery Building
(9) Vats (Inside Raceways) in Hatchery Building
(10) Outside Race #5 – Headrace, Fish in Raceway & Tailrace
(11) Fuel Tank Area
(12) Chiller Building with Chemical Storage
(13) Traveling Screen for feeding fish in Outside Raceways
(14) FFSB – West and East Ponds
(15) OLSB
(16) Rim View Diversion Canal
(17) Outfall to Niagara Springs Creek

See Exhibit D for the new flow design of the facility.

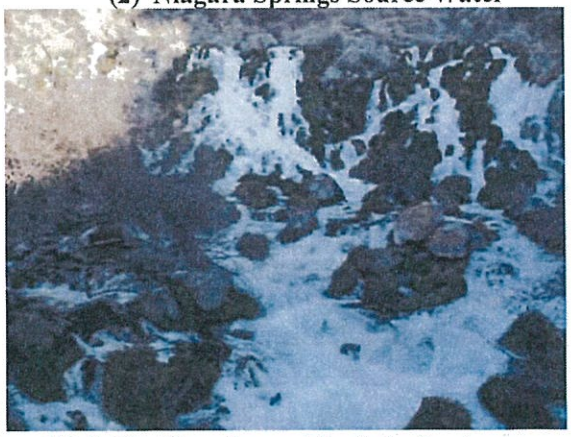
(1) FRONT ENTRANCE and
(2) NIAGARA SPRINGS SOURCE WATER

IDEQ visited the Front Entrance and the Niagara Springs Source Water prior to visiting with Mr. Chapman in the Main Office of the Hatchery Building.

(1) Front Entrance

Digital 1. View from Niagara Springs Grade

(2) Niagara Springs Source Water

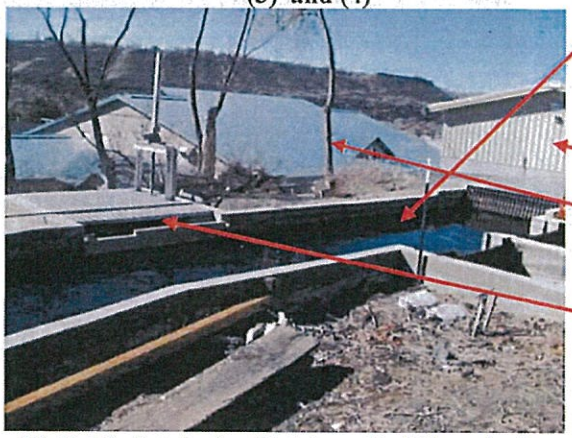


Digital 2. View from visitor's lookout area

(3) Rim View Canal and
(4) Intake/Diversion Structure to Hatchery Building From Rim View Canal

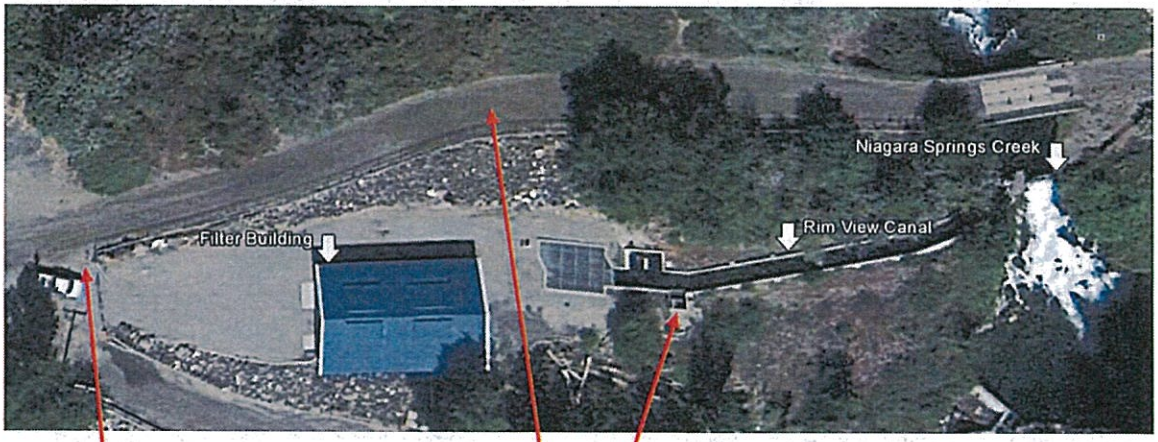
Mr. Chapman took IDEQ to the Rim View Canal and showed with the Diversion Intake occurs that sends water to the Filter Building and then to the new Hatchery Building.

(3) and (4)



Digital 3. Intake for Hatchery Building via the Filter Building.

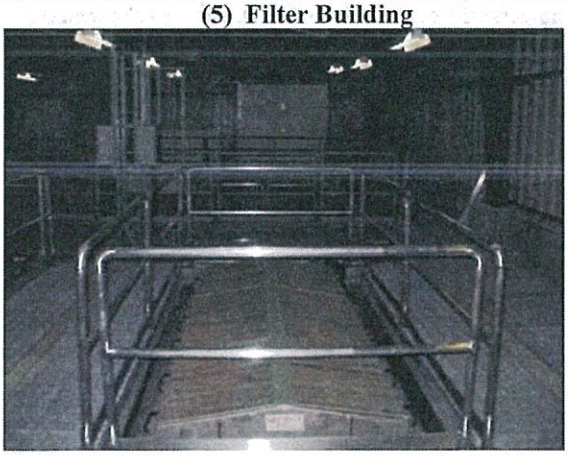
A Google Earth figure of the new facility, as viewed from the Niagara Springs Grade road, is as follows with appropriate identification of various locations. Note location of Filter Building.



(5) FILTER BUILDING

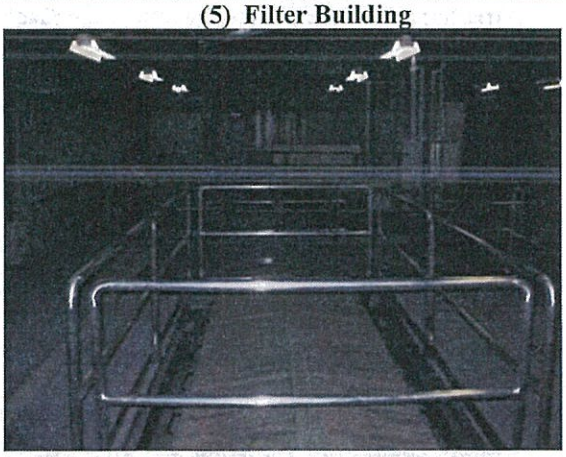
Mr. Chapman took IDEQ into their new Filter Building. The Filter Sump is lies below the filter compartments.

(5) Filter Building



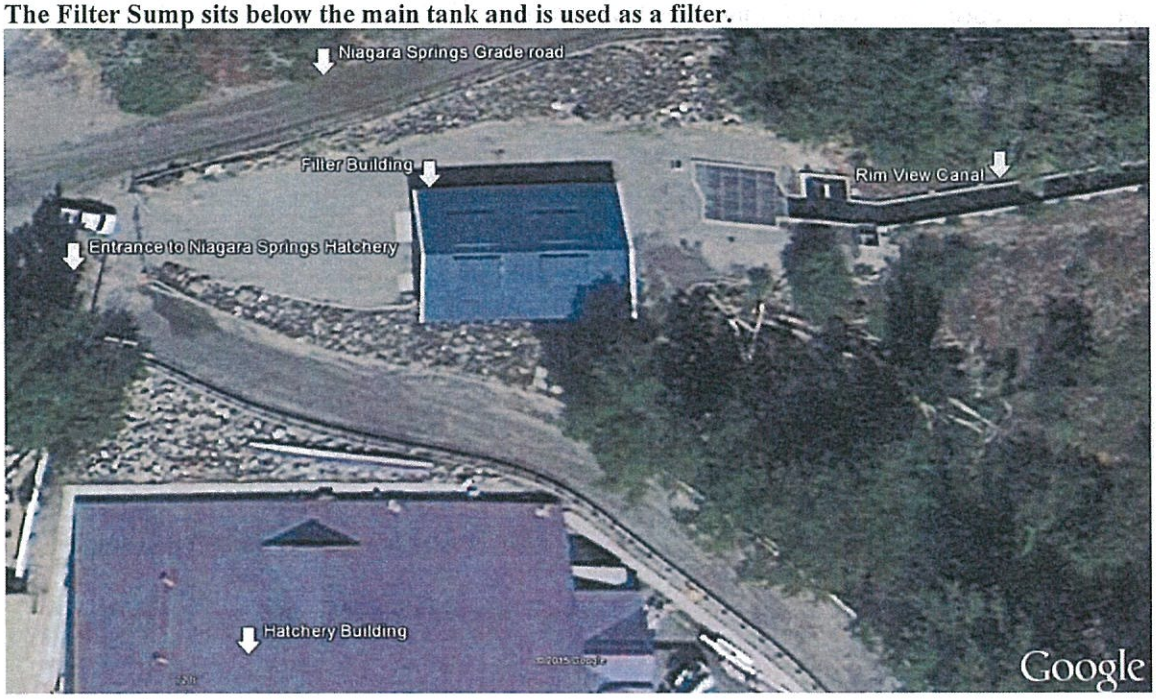
Digital 4. Northernmost in Filter Building

(5) Filter Building



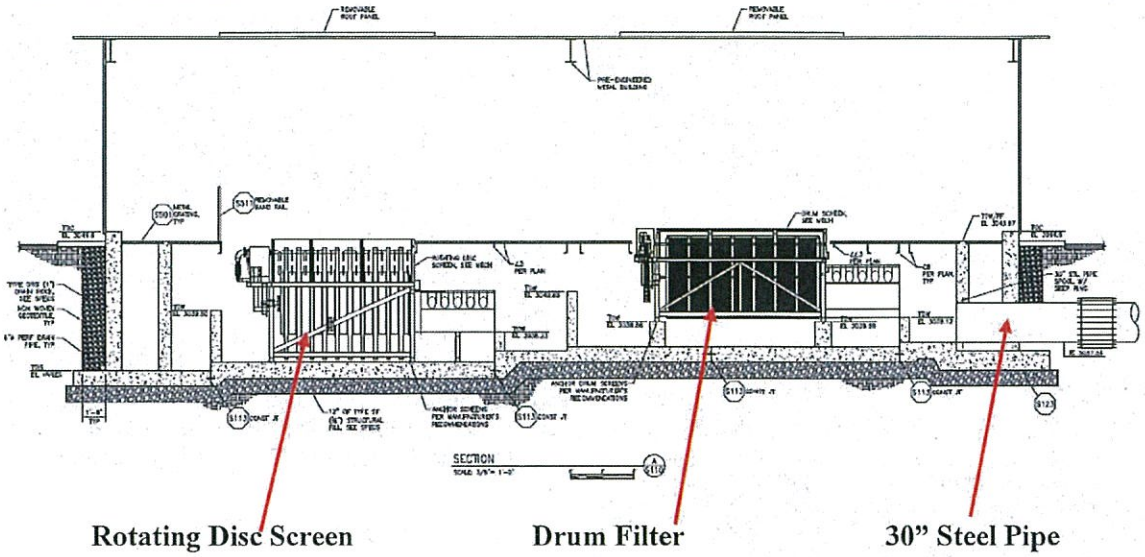
Digital 5. Southernmost in Filter Building

A Google Earth figure of the Filter Building is shown below. A new Filter Sump makes up the foundation of the Filter Building. The primary purpose is to keep the water free of contaminants. It also allows for water aeration and allows for keeping the water level stable as it enters into the Hatchery Building; thus keeping it more stable and less prone to fluctuations of pH and salinity. The Filter Sump sits below the main tank and is used as a filter.



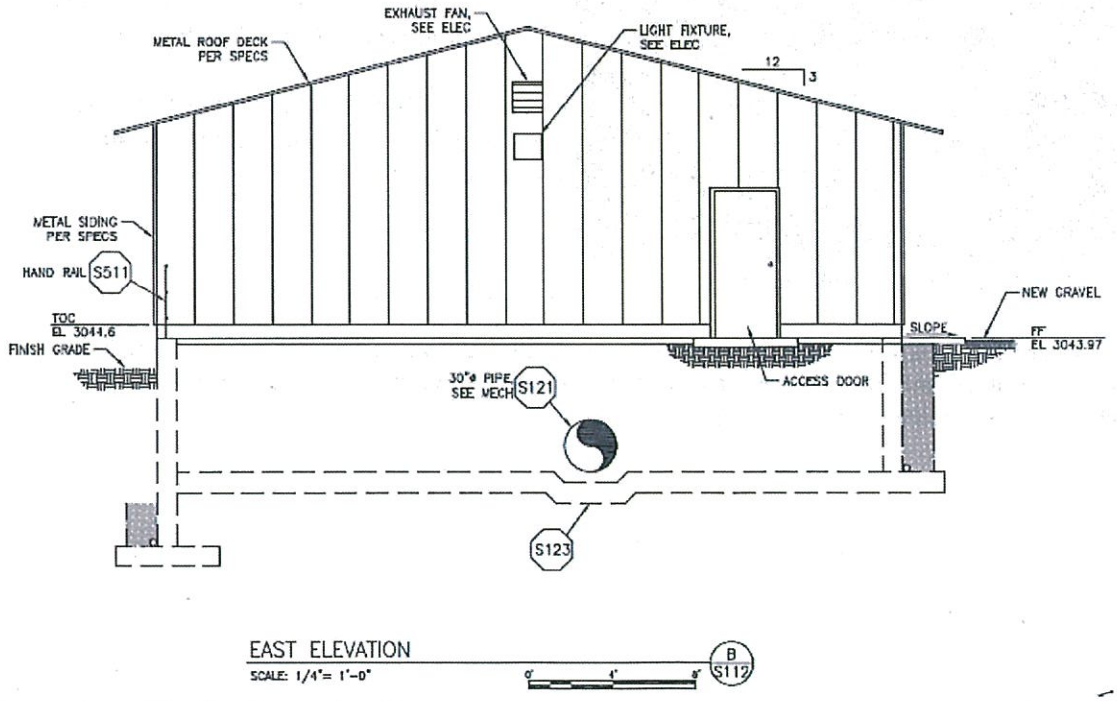
The Filter Building receives water via a 30" steel pipe that enters into a two drum filters in parallel. The water then continues to two rotating disc screens in parallel. The water exhausts out from the Filter Building via a 24" pipe into the Hatchery Building. The following figure shows a cross section of the Filter Building.

West Elevation Side **East Elevation Side**



Rotating Disc Screen **Drum Filter** **30" Steel Pipe**

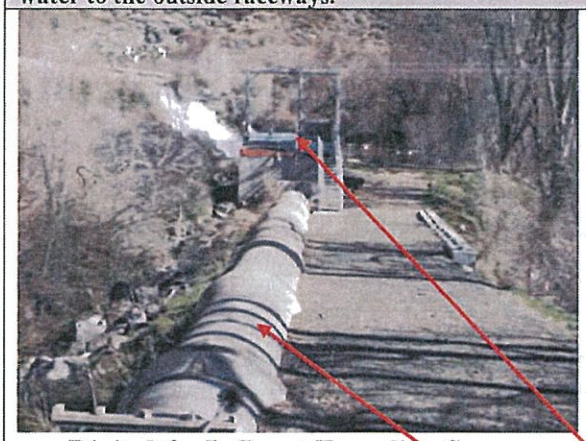
The following figure shows the Filter Building from the east side (or East Elevation).



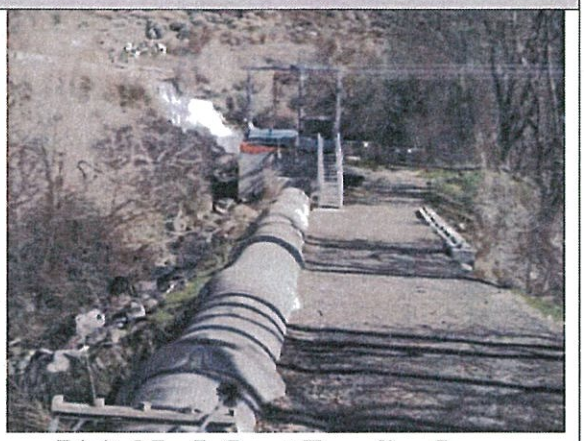
(6) INFLUENT TRAVELING SCREEN ON INFLUENT PIPELINE TO OUTSIDE RACEWAYS

(7) SPLITTER BOX

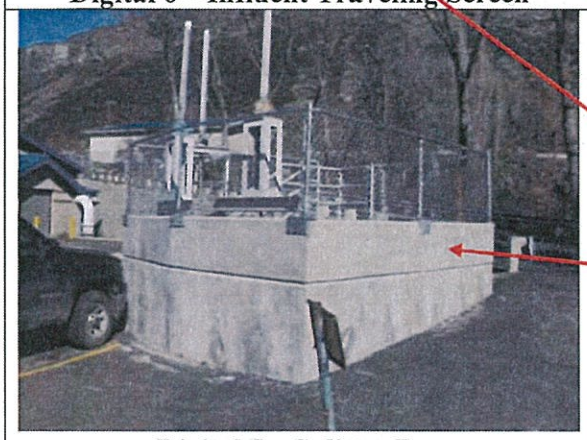
Mr. Chapman explained that the traveling screen resides at the headbox. The water enters the headbox and after passing through the traveling screen, goes to the 48" RCP (reinforced cement pipe) pipeline that sends water to the outside raceways.



Digital 6 – Influent Traveling Screen



Digital 7 – Influent Traveling Screen



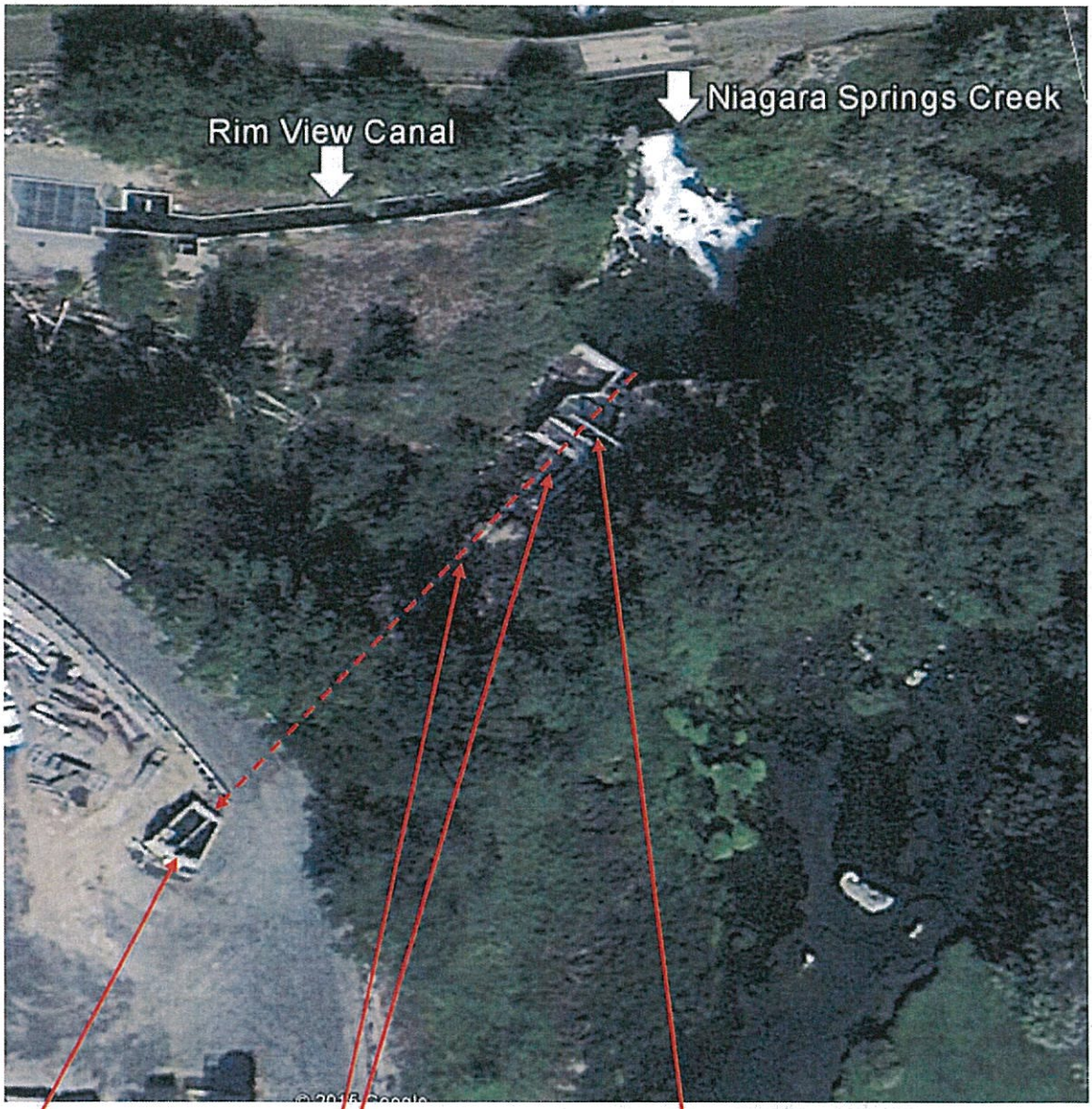
Digital 8 – Splitter Box

Traveling Screen by Headbox to pipeline.

Cement pipeline from Headbox with Traveling Screen to the Splitter Box.

Splitter Box that takes Niagara Springs influent water to the Outside Raceways.

The following Google Earth figure shows the approximate location of the Niagara Springs Creek water (coming from the Niagara Springs Source) to the Headbox with the Traveling Screen through the cement Pipeline to the Splitter Box.



Splitter Box **Cement Pipeline** **Headbox with Traveling Screen**

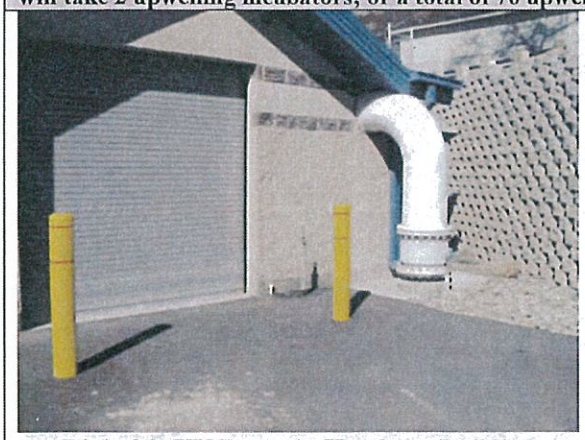
The dotted line represents the approximate location of the cement Pipeline (from the Headbox with Traveling Screen) to the Splitter Box. From the Splitter Box the water is piped to the Outside Raceways.

(8) UV ROOM IN HATCHERY BUILDING

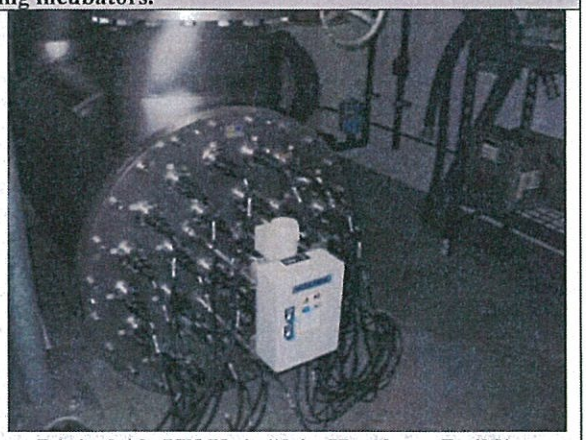
(9) VATS (INSIDE RACEWAYS) IN HATCHERY BUILDING

Mr. Chapman showed IDEQ the new UV Room in the Hatchery Building. The water enters the UV Room from the Filter Building; where the water goes through a series of UV Units under pressure. It provides biological disinfection by UV electromagnetic radiation by killing or inactivating microorganisms. The dosing contact time is typically between 10 to 30 seconds; and is a product of UV intensity and exposure time. There are 3 UV units (#1, #2 and #3) that each treats approximately 9 cfs of water. The use of the Filter Building in conjunction with the pressurized UV Room in the Hatchery Building is to suppress the potential effects from pathogens such as IHN (Infectious Hematopoietic Necrosis), IPN (Infectious Pancreatic Necrosis), FR (Furunculosis), ERM (Entric Redmouth Disease), VHS (Viral Hemorrhagic Septicemia), WD (Whirling Disease), CWD (Cold Water Disease) and NU (Nucleospora).

The water is then piped to the Vats inside the Hatchery Building. There are 38 Vats that are 50' long. Each will take 2 upwelling incubators; or a total of 76 upwelling incubators.



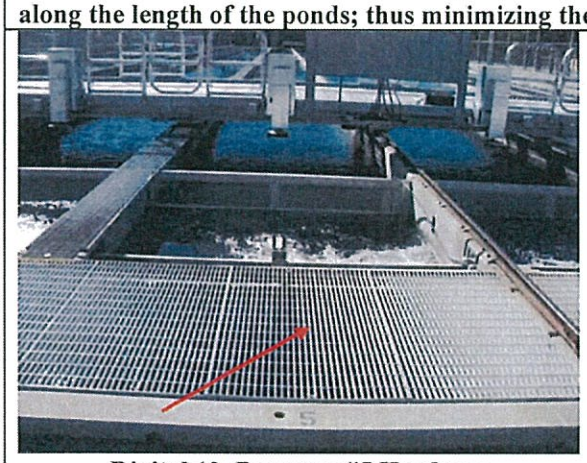
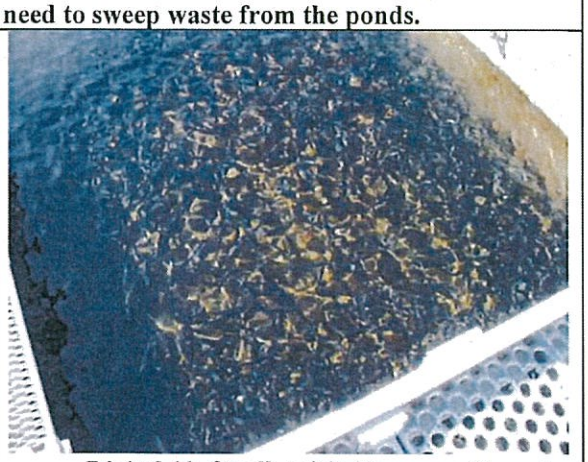
Digital 9. UV Room in Hatchery Building

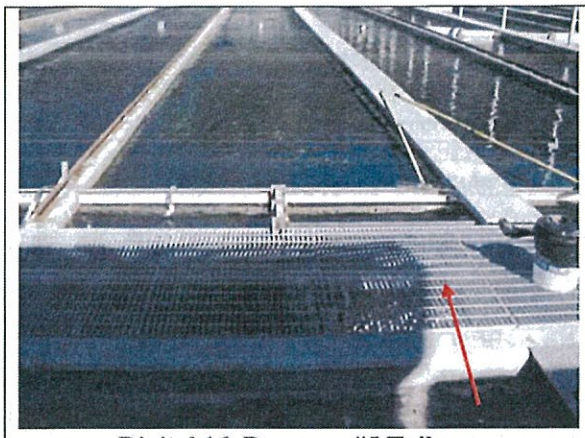


Digital 10. UV Unit #3 in Hatchery Building

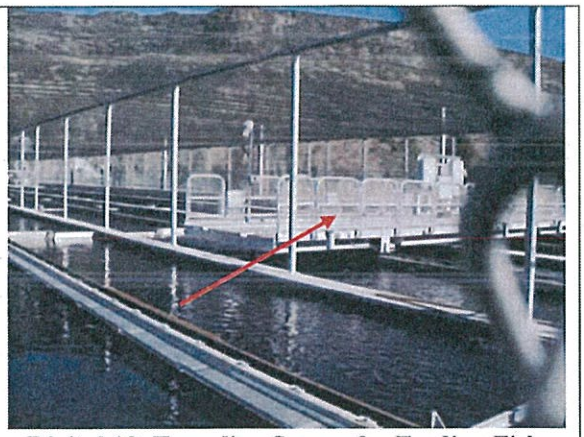
Digital 11. Vats inside Hatchery Building

Vats (or Inside Raceways) inside the Hatchery Building

(10) OUTSIDE RACEWAY #5 – HEADRACE, MAIN RACEWAY & TAILRACE (13) TRAVELING SCREEN FOR FEEDING FISH IN OUTSIDE RACEWAYS **Mr. Chapman showed IDEQ the Outside Raceways. Steelhead was present in all of the raceways. IDEQ selected Raceway #5 at random, and did a review of the raceway at its headrace, main raceway and tailrace. At the time of the visit, the steelhead was being fed via the new automatic Traveling Screens (3 of them).**	
1. Any excessive feed in the raceways?	Yes **No – IDEQ noted no excessive feed in the raceways.**
2. Any excessive solids stirred up in raceways?	Yes **No – IDEQ noted no excessive solids stirred up in the raceways.**
3. Are all the barrier dam boards in place and level?	**Yes – IDEQ noted that the dam boards were all in place and level.** No
4. Any excessive solids built up in quiescent zones?	Yes **No – Mr. Chapman explained that there are no quiescent zones on the facility.**
5. Any excessive solids going over the dam boards.	Yes **No – IDEQ noted no excessive solids going over the dam boards.**
6. Any fish observed in the quiescent zones?	Yes **No – Mr. Chapman explained that there are no quiescent zones on the facility.**
7. Raceway Cleaning of Outside Raceways – **Mr. Chapman explained that the outside raceways have automated cleaning. Three air blower motors supply weighted, perforated, air lines on the bottom side corner of each pond. The resulting water currents keeps organic waste material suspended along the length of the ponds; thus minimizing the need to sweep waste from the ponds.**	
 **Digital 12. Raceway #5 Headrace**	 **Digital 13. Steelhead in Raceway #5**



Digital 16. Raceway #5 Tailrace



Digital 19. Traveling Screen for Feeding Fish.

Digital 12. Headrace of Raceway #5 shown by red arrow pointing to it.

Digital 13. Summer Steelhead in Raceway #5.

Digital 16. Tailrace of Raceway #5 shown by red arrow pointing to it.

Digital 19. Traveling Screen #3 feeding Raceways 15-19. IDFG employee makes certain that feed is being delivered appropriately to the raceways as the traveling screen moves across the top of the raceways; and the feed is mechanically dropped into the raceways.

See the Google Earth figure that follows showing the 3 sets of Outside Raceways in relationship to the 3 new Traveling Screens.

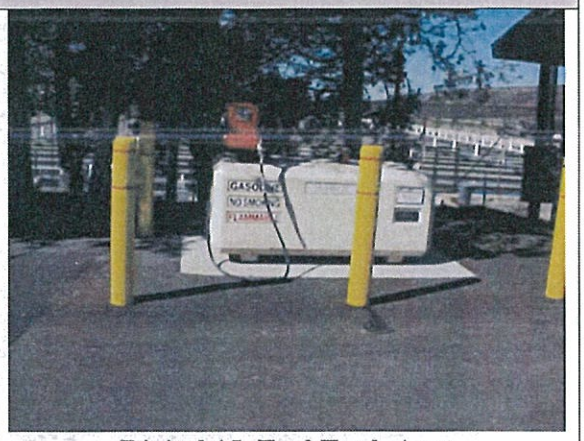
Outside Raceways – 3 Parallel Sets – Raceways 1-7, 8-14 and 15-19.

Traveling Screen 1 Raceways 1-7 | **Traveling Screen 2 Raceways 8-14** | **Traveling Screen 3 Raceways 15-19**

(11) FUEL TANK AREA

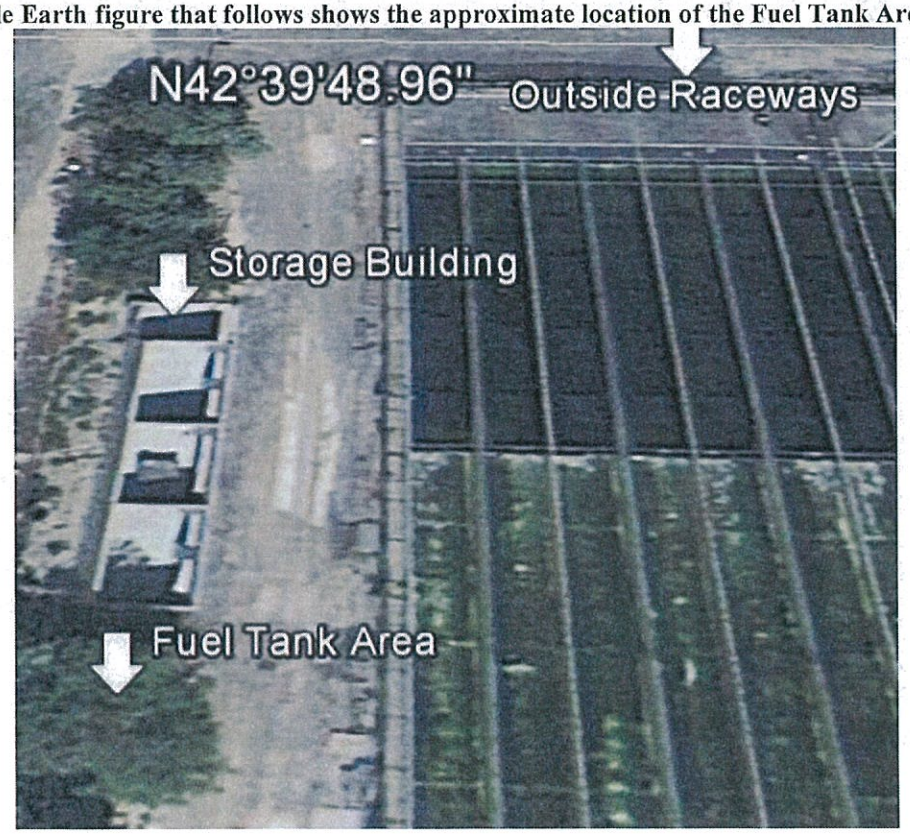
Mr. Chapman explained that the fuel tank area is situated in an outside area, away from the buildings, for refueling of their vehicles. IDEQ noted some minor historical stains where vehicles park for refueling. No smells from the fuel tank were noted. The fuel tank area is located west of Raceway #1 and south of the new Storage Building.

Digital 14. Fuel Tank Area



Digital 15. Fuel Tank Area

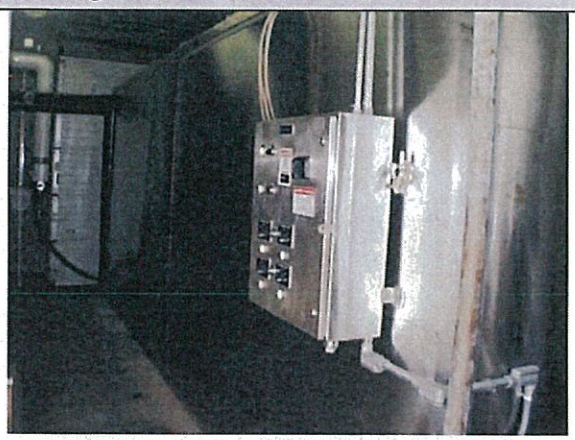
The Google Earth figure that follows shows the approximate location of the Fuel Tank Area.



(12) CHILLER BUILDING AND CHEMICAL STORGE

The chiller building is located south of the outside raceways and north of the FFSBs (just north of the West FFSB). The Chlorine Storage Building is located between the Chiller Building and the West FFSB.

Digital 17. Inside Chiller Building – Chemical Storage



Digital 18. Inside Chiller Building – Chiller Mechanism

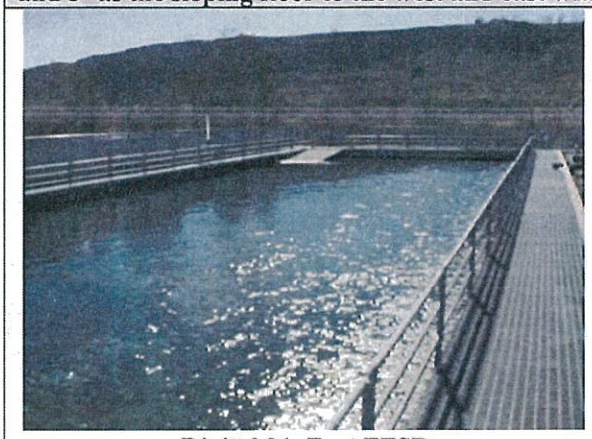
Digital 17. Only oil was being contained in the 3 storage containers. No chemical storage was present.

Digital 18. The Chiller Mechanism is located in a separate room in the Chiller Building.

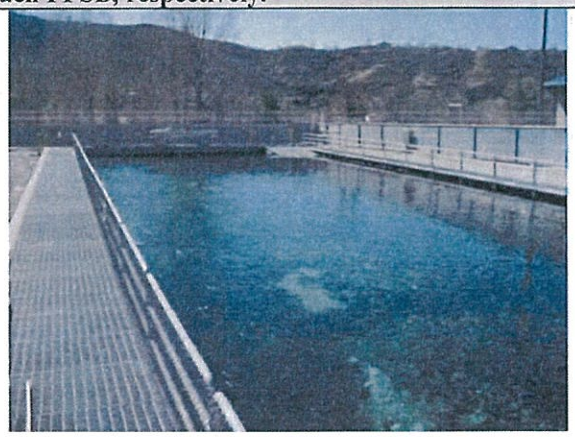
The Google Earth figure that follows shows the location of the Chiller Building.

(14) FFSBs

Mr. Chapman stated that the FFSBs (West and East) have a common walkway between them. The FFSBs each are 120' long and 60' wide and 3'-5' in depth with a sloping floor (5' nearest the common walkway and 3' as the sloping floor to the west and east within each FFSB, respectively.



Digital 21. East FFSB



Digital 20. West FFSB

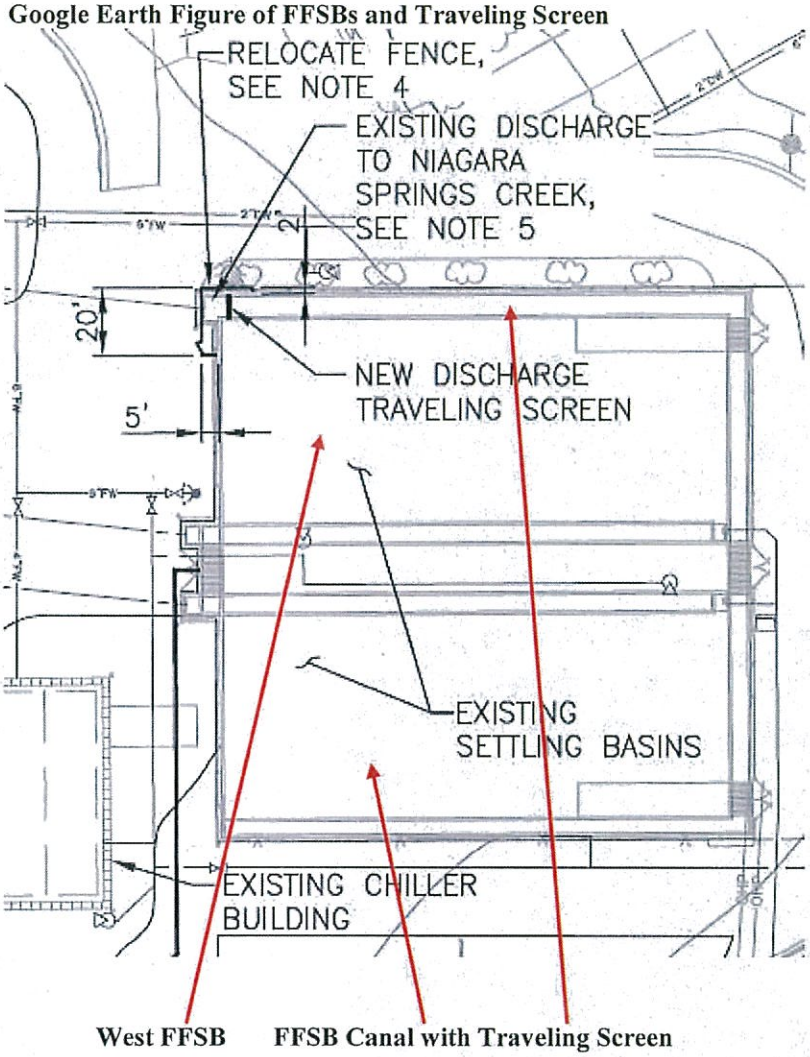
The discharge from the FFSB goes to two locations. Approximately 120 cfs is returned to Niagara Springs Creek, which then discharges to the Snake River. And approximately 70 cfs is diverted through a Diversion Channel to the Rim View Trout Hatchery. The flow, based on a summary of DMR values from 2007 to 2015, was in the range of 75.97-130.63 cfs; with a mean of 75.97 cfs and a median of 81.00 cfs.

A review of the TSS and TP average monthly values in the DMRs from 2007 to 2015 indicates the following:

Parameter	Mean Influent, mg/L	Mean Effluent, mg/L	Net Load, lbs/day	Net Wasteload Allocations, lbs/day			
				Jan-Apr	May-Aug	Sep-Dec	Mean Annual
TSS	0.97	0.99	7.3	2980.8	853.7	2019.2	1951.2
TP	0.014	0.031	8.4	22.0	6.3	14.9	14.4

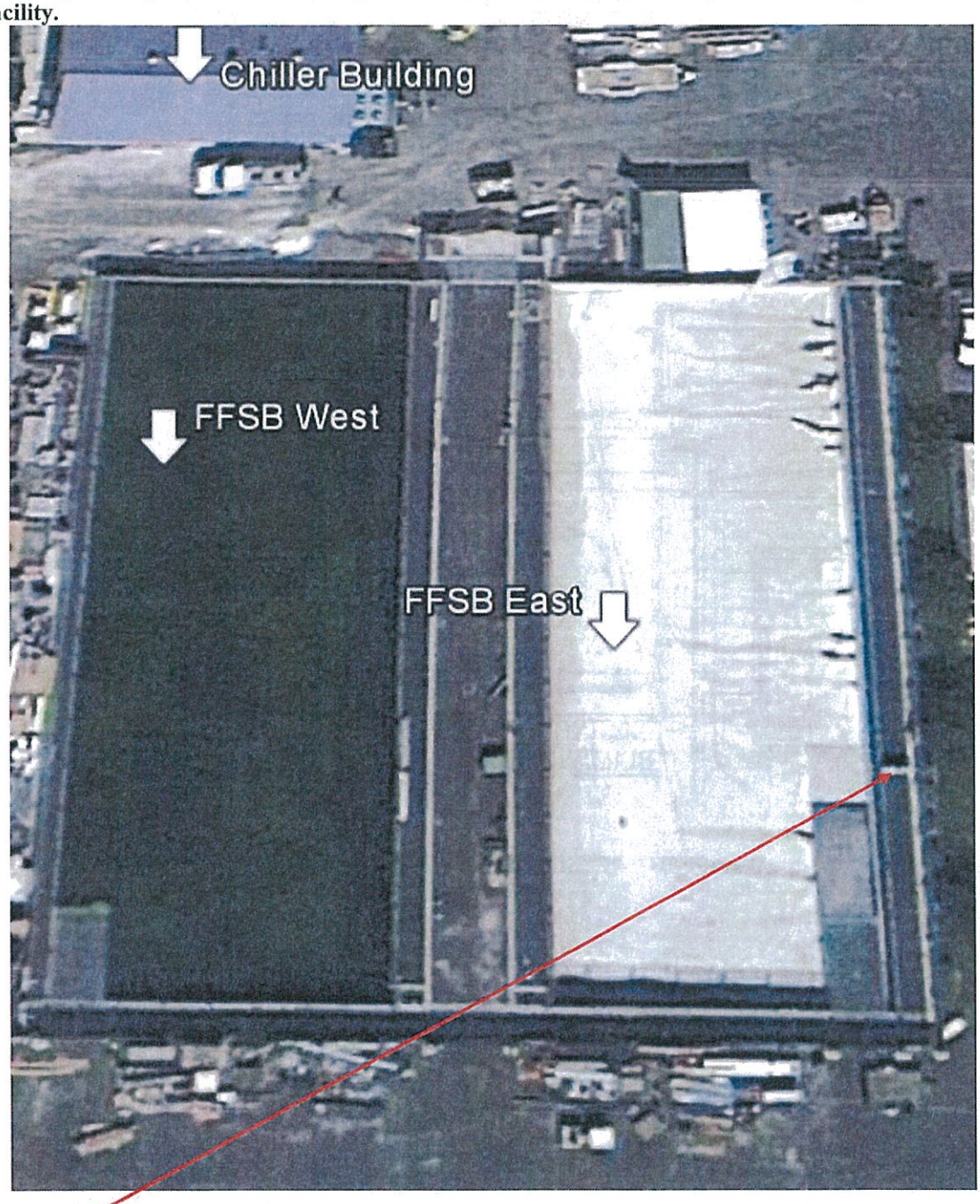
The following Google Earth figure shows the two FFSBs and the Traveling Screen associated with the cement ditch that takes the wastewater to the Effluent Monitoring location, and then onto the Outfall to Niagara Springs Creek.

Google Earth Figure of FFSBs and Traveling Screen



East FFSB **West FFSB** **FFSB Canal with Traveling Screen**

The following Google Earth figure shows the location of the FFSB in relation to the Chiller Building. The figure was taken on September 18, 2013 when remodeling was occurring on the facility.



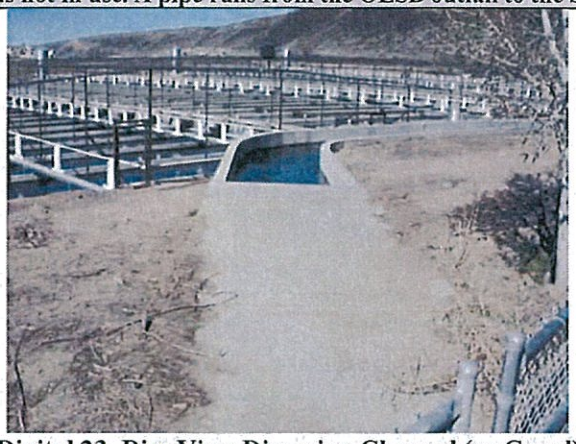
Traveling Screen for cleaning the wastewater being returned to Niagara Springs Creek

(15) OLSB

(16) DIVERSION TO RIM VIEW TROUT FARM

Mr. Chapman demonstrated the diversion and sampler box to the Rim View Trout Farm that is found at the southwest corner of the West FFSB.

Mr. Chapman confirmed that the clean liquid effluent from the FFSBs is "decanted" to the OLSB where it is held temporarily to "polish off" any additional suspended material before discharging to the Snake River only during the time that the FFSBs are being cleaned (which is twice per year). The OLSB was dry at the time of the CEI site tour and was not in use. A pipe runs from the OLSB outfall to the Snake River.

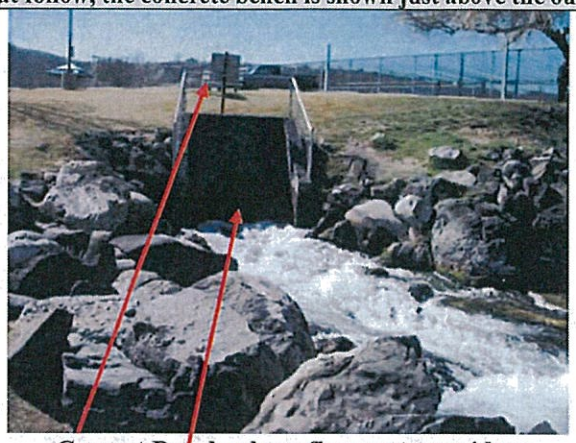
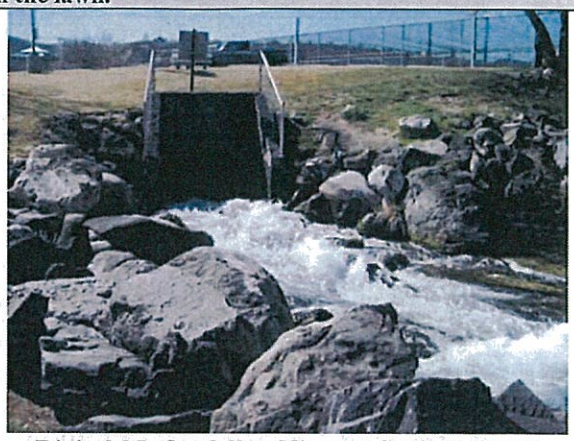


Digital 23. Rim View Diversion Channel (or Canal)

Digital 22. OLSB

See the following Google Earth figure that shows the OLSB and the Rim View Diversion Channel.

The Google Earth figure that follows shows the approximate location of the Diversion Channel in relationship to the OLSB.

(17) OUTFALL TO NIAGARA SPRINGS CREEK **The effluent is monitored by an automatic flow meter that resides underneath the concrete bench. In the two digitals that follow, the concrete bench is shown just above the outfall on the lawn.**	
 **Cement Bench where flow meter resides.** **Digital 24. Outfall to Niagara Springs Creek**	 **Digital 25. Outfall to Niagara Springs Creek**
Are there any unreported outfalls? (check observed against NOI)	Yes **No – Mr. Chapman confirmed that there are no additional unreported outfalls on the facility.**
If so, describe:	**N/A**
1. Any floating solids or visible foam in other than trace amounts?	Yes **No – IDEQ did not visually see any floating solids or visible foam coming from the effluent outfall into Niagara Springs Creek.**
2. Any evidence of discharged sludge, grit or accumulated solid residues?	Yes **No – IDEQ did not visually see any evidence of sludge, grit or accumulated solid residues from the effluent outfall into Niagara Springs Creek.**
3. Any floating, suspended or submerged matter, including dead fish, in amounts causing nuisance or objectionable condition?	Yes **No – IDEQ did not visually see any floating, suspended or submerged matter, including dead fish from the effluent outfall into Niagara Springs Creek.**
4. Location of the receiving water monitoring.	**N/A – Mr. Chapman confirmed that the facility does not conduct receiving water monitoring.**

The following Google Earth figure shows the location of the Outfall to Niagara Springs Creek.

Google Earth figure of Outfall and Flow Meter locations.

FLOW MEASUREMENT DEVICE(S)	
Mr. Chapman confirmed that the facility has the following flow measurement devices: **(1) Outside Raceways influent spring water from Niagara Springs, which flow is recorded in a Milltronics OCM III Flow Meter (or Annubar) inside the main office. This meter is an open channel meter (OCM).** **(2) Effluent Outflow from the FFSBs to Niagara Springs Creek via an ultrasonic flow meter that is located near the effluent outfall into Niagara Springs Creek.** **(3) Diversion Ditch to Rim View Hatchery via the diversion headgate with a calibrated staff gage.** **(4) Flow measuring device that is in the pipeline that diverts water from the Rim View Canal to the Filter Building and then to the Hatchery Building. The flow goes from the Filter Building to the UV Room in the Hatchery Building. The measuring device is past the Filter Building and before the UV Room.** **(5) A differential flow is taken as bypassed flow from the Filter Building to Niagara Springs Creek, which goes over "the top of the wall".** **(6) There is also a staff gage at Lower Pool of the Niagara Springs Source water to provide 5 cfs as scenic value of return water to Niagara Springs Creek.** **See Exhibit D for flow design of the facility.**	
1. Were flow measurements taken during inspection?	Yes **No – IDEQ did not request flow measurements during the CEI.**
2. Location of influent flow measuring device for raceways:	Influent Head Box Raceway or Tailrace Effluent Other **Milltronics OCM III Flow Meter**
3. Location of flow measuring device for FFSBs:	Effluent Box Effluent Pipe QZ cleaning time Other **Flow Meter that read in the Main Office**
4. How are flow measurements taken for the diversion to Rim View Trout Farm?	Across a dam board V-Notched weir Other weir _____ Other **Staff Gage off of Diversion Headgate**
SAMPLING LOCATION & SAMPLING PREPARATION **Mr. Chapman confirmed that the Influent and Effluent sampling locations are the same and appropriate for the facility. The facility is still using the Sigma 900 Samplers for both its Influent and Effluent locations.**	
1. Are influent sample locations adequate?	**Yes – IDEQ confirmed that the influent locations are appropriate for the facility as approved by EPA and IDEQ.** No
2. Are effluent sample locations adequate?	**Yes – IDEQ confirmed that the effluent locations are appropriate for the facility as approved by EPA and IDEQ.** No
3. Are samples refrigerated / iced down after sampling?	**Yes – Mr. Chapman confirmed this.** No
4. Are samples iced down during transportation to contract Lab?	**Yes – Mr. Chapman confirmed this before shipping to the Rangen Lab.** No

SOLIDS CONTAINMENT & STORAGE Mr. Chapman confirmed again the Waste Solids Management Plan that was submitted to IDEQ on October 17, 1995.	
1. Is the solids disposal area adequate?	**Yes – Solids from the FFSBs and the OLSB are taken to an upland area on the Niagara Springs Wildlife Management Area.** No
2. Removed solids prevented from reentry to navigable waters?	**Yes – Mr. Chapman confirmed that solids are land applied in an area that does not have the potential to reenter navigable waters.** No
3. Does the facility land apply solids or irrigate with or apply wastewater?	**Yes – IDEQ confirmed that the facility has an IDEQ approved waste disposal plan for land application.** No

4. IDEQ previously, in 2011, did a review of its records and confirmed a Solid Waste Management Plan submitted by Idaho Power Company for the Niagara Springs Hatchery on October 13, 1995. The IDEQ inspection report of June 28, 1996 indicates that a Waste Solids Management Plan was submitted to IDEQ on October 17, 1995. The inspection report stipulates, "*This waste solids plan meets the current permit conditions for the Niagara Springs NPDES permit. The Waste Solids Management Plan may routinely need updating or revision to meet future NPDES permit requirements or requirements of the Mid Snake River Nutrient Management Plan.*" According to the documentation of the October 13 1995 submission:

a. **At the time the FFSBs are cleaned, "*the facility is then dewatered, disinfected and prepared for the next production cycle. Accumulated solid wastes are removed from the settling basins twice each year…*"**
b. **Additionally, "*…3 methods of solid waste collection are available. These methods include decanting clear water from the settling basins and pumping the sludge into tank trucks for disposal, vacuuming the sludge from the settling basins to a third basin for greater concentration and eventual disposal and decanting clear water from the basins and allowing the sludge to dry in place for eventual removal with conventional trucks and loading equipment.*"**
c. **As described in this plan, and as confirmed by Mr. Chapman, "*Current hatchery operations employ the first method of solid waste removal. Under this scenario clear water is decanted from the settling basins [FFSBs] by removing stop logs from the basin outlets one-by-one over a period of several days. The clear water is routed through a third settling basin [OLSB] before being discharged to the Snake River. Once the clear water has been drawn off, the sludge is directed to a sump area where a pump is located. The sludge is then loaded onto a tank truck for off-site disposal.*"**
d. **"*The IDFG Niagara Springs Wildlife Management Area (WMA), located less than 1 mile west of the Niagara Springs Hatchery is used as a disposal site for all solid wastes collected from the settling basins at the hatchery.*"**
e. **"*Sludge from the Niagara Springs Hatchery settling basins is transported to the WMA via tank truck and applied to the ground surface. An estimated 56,000 gallons of sludge are deposited annually at this location. …individual disposal sites within the WMA are located a minimum of 200 yards from the Snake River and are used on an annual rotation to avoid excessive concentration or percolation of nutrients. No surface runoff of waste material is allowed to enter the Snake River.*"**

The following Google Earth figure shows the location of the biosolids land application site on the Niagara Springs Wildlife Management Area.

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Google Earth figure of land application site just west of Rim View Hatchery.

Land application field for Niagara Springs Hatchery

Rim View Hatchery

INSPECTION CONCLUSION DATA SHEET (ICDS) INFORMATION	
1. Did you observe deficiencies (potential violations) during the on-site inspection?	Yes **No – IDEQ did not observe any deficiencies or potential violations during the site tour.**
2. If so, did you communicate them to the facility during the inspection?	Yes **No – IDEG did not observe any deficiencies or potential violations during the site tour.**
3. Did the facility or operator take any corrective actions	Yes **No – No corrective actions were required because no deficiencies or violations were observed by IDEQ.**
4. Did you provide general compliance assistance during the inspections?	Yes **No – IDEQ did not provide any general compliance assistance during the inspection.**
5. Did you provide site-specific compliance assistance?	Yes **No – IDEQ did not provide any site-specific compliance assistance during the inspection.**

AREAS OF CONCERN

1. IDEQ noted no areas of concern at this time with the facility.

2. IDEQ noted no violations of the NPDES permit or Idaho water quality standards during the site tour.

3. There were only some DMR errors as investigated by IDEQ and explained in Exhibit A. The DMR errors for the months reported (2007-2015) are summarized as follows:

a. **Lack of Reporting Net TSS Load. Monitoring for 2007-2015 was based on 39 sampling events. The Net TSS Concentration values were summarized in 39 sampling events. However, the TSS Net Load was summarized in only 37 sampling events (or 94.9% of the 39 sampling events) due to no reporting in December 2007 and February 2013. As described in Exhibit A, the nature of no reporting was most likely due to an oversight. IDEQ does not consider this to be an issue because the Net load would ultimately be zero, since the net concentration is zero.**

b. **Net TSS Concentration Calculation. IDEQ did a calculation comparison with IDFG's reported DMR value for Net TSS. Five (5) months (as discussed in Exhibit A) had mis-calculations for Net TSS; or 87.2% of the 39 sampling events were reported correctly during the 2007-2015 period. This is principally due to training that was conducted by the University of Idaho Extension Service, and to which the aquaculture industry determined that they did not want to report a net calculation of zero; so they opted to report a net value of 1.00 mg/L TSS. In the previous IDEQ inspection of December 15, 2011, IDEQ discussed with IDFG the necessity of reporting the net concentration values as shown in Appendix D of the General Aquaculture Permit. IDFG has since corrected this.**

c. **Net TSS Load Calculation. IDEQ did a calculation comparison of IDFG's reported DMR value for Net TSS Load. Seven (7) months (as discussed in Exhibit A) had mis-calculations; or 82.1% of the 39 sampling events were reported correctly during the 2007-2015 period. Four (4) of the seven (7) months had to do with the reason previously noted in item b – the training conducted by the University of Idaho Extension Service. Two (2) of the seven (7) months had to do with no reporting done. And one (1) of the seven (7) months had to do with a computational error that gave an erroneously high net value. Again, in the seven (7) instances, the IDEQ calculations indicated a Net TSS Load of 0.00 lbs/day TSS. Therefore, although there were seven (7) mis-calculations (two of which were no reporting), the IDEQ calculation confirms that in all cases a net value of zero was the result. So, there was no actual net value > zero in lbs/day TSS load. IDFG has corrected this since the IDEQ inspection of December 15, 2011.**

d. <u>TP Net Load Calculations</u>. **IDEQ did a review of the TP Net Load for 2007-2015 DMRs and determined that 38 of the 39 sampling events were reported correctly (or 97.4%). (See Exhibit A.) The mis-calculation was based on a reporting of 0.034 versus the correct value of 0.033.** **IDEQ discussed these DMR errors with the facility manager. This discussion is summarized in Exhibit A.**
Other Issues:
1. The current Solid Waste Management Plan should be updated based on the upcoming reissuance of the General Aquaculture Permit for this facility.

Exhibit A. DMR Review – January 2007 through January 2015

IDEQ reviewed DMRs from January 2007 through January 2015. A summary of that review is as follows.

1. **MONITORING FREQUENCY. Mr. Chapman confirmed that the facility monitors on a quarterly basis (Jan-Mar; Apr-June; Jul-Sep; Oct-Dec) but with trimester effluent limits (Jan-Apr; May-Aug; and Sep-Dec). The following table was confirmed by Mr. Thompson & Mr. Chapman as the months in which the quarterly monitoring was done within the trimesters from January 2007 through January 2015.**

MONITORING SCHEDULE: 2007-2015

Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2007	X	X	X	X		X	X	X	X	X	X	X
2008	X					X			X			X
2009		X				X			X			X
2010		X		X					X			X
2011			X			X			X			X
2012			X			X			X			X
2013		X				X			X			X
2014		X		X					X			X
2015	X											
Quarters	Winter		Spring			Summer			Fall			Winter

Trimester Limits: 1st Trimester 2nd Trimester 3rd Trimester

Within the conditions of the permit, the facility may monitor within the quarter at any time. However, Mr. Chapman stated that monitoring is done according to fish production. The months of February and March are considered the "heavy" months for production; whereas June, September and December seem to be the most stable. So monitoring between January and April is not as consistent as monitoring in June, September and December. At this point, no monitoring has been done in May; and since 2008, no monitoring has been done in July, August, October and November.

2. **EPA DMR Forms. There appear to be 2 types of DMR forms that the facility has reported to EPA and IDEQ since 2007. From January 2007 through January 2008 (or 13 months) the facility reported on CRB-1 DMR Forms. Then from February 2008 to the present (January 2015), the facility has reported in SUMA or SUM-A DMR Forms, because the NPDES Permitting Group of Region 10 determined that this was a better form in order to report the wasteload allocations from the Upper Snake Rock TMDL. In previous inspection of 2011, IDEQ-TFRO confirmed this change in forms with EPA (Carla Fromm).**

3. **Temperature Monitoring and Reporting. In the 2011 inspection, IDEQ noted that temperature for both Influent and Effluent was taken from January 2007 through December 2007. Then, beginning in January 2008 temperature was no longer taken or reported. On December 16, 2011 IDEQ confirmed that the NPDES permit (Table 12, Footnote 20) states "*Temperature monitoring is only required for discharges from warm-water facilities.*" The Niagara Springs Hatchery is not a warm-water facility. And, Niagara**

Springs Creek and the Snake River assessment unit are not listed for temperature at this time. So, temperature monitoring is not warranted.

4. Net TSS Concentration and Load. Influent and Effluent TSS monitoring was conducted for 39 events. Therefore, the Net concentration value is representative of 39 events. However, the Net load (lb/day) is only 37 events (or 94.9%); and this is because no reporting was done in December 2007 and February 2013. The nature of no reporting was most likely due to an oversight. IDEQ does not consider this to be an issue because the Net load would ultimately be zero, since the net concentration is zero.

   In comparing the Net TSS concentration and the Net TSS load (lb/day), IDEQ notes the following discrepancies:

   a. The IDEQ calculation for Net TSS concentration does not equate to what is in the DMRs for the months of December 2008, February 2009, June 2009, September 2009, and March 2012; or a total of 5 events mis-calculated (or 5 mis-calculated in 39 events or 12.8%).

Month Year DMR	Facility Net TSS Concentration Calculation	IDEQ Calculation
December 2008	1.00	0.00
February 2009	1.00	0.00
June 2009	1.00	0.00
September 2009	1.00	0.00
March 2012	0.34 (or 0.3375)	0.00

   b. The IDEQ calculation for Net TSS load (lb/day) does not equate to what is in the DMRs for the months of December 2007, December 2008, February 2009, June 2009, September 2009, March 2012, and February 2013; or a total of 7 events mis-calculated (or 7 mis-calculated in 39 events or 17.9%).

Month Year DMR	Facility Net TSS Load Calculation	IDEQ Calculation
December 2007	Not Reported	0.00
December 2008	1.00	0.00
February 2009	1.00	0.00
June 2009	1.00	0.00
September 2009	1.00	0.00
March 2012	218.50	0.00
February 2013	Not Reported	0.00

   IDEQ contacted Jerry Chapman on March 24, 2015 and provided the information to him. And he responded on March 25, 2015 with the following:

   a. For the Net TSS Concentration, "*when there is a 1.0 calculation, it should have been a 0.0 as IDEQ has listed, but because of training methods at the time [training by*

University of Idaho], those values were reported as 1.0." In the DEQ inspection of 2011, "*Mr. Chapman explained that many in the industry were confused in the method of reporting the concentration MDL in lb/day.*"

b. For the Net TSS Load, "*same as above for the 1.0 calculations. The 218 TSS number for 3/12 is identified below as the monthly calculated concentration. The Feb 2013 not reported value was an oversight by the person filling out the form, who just forgot to fill it out as a 0.0. We're still looking for the Dec 2007 DMR for that non-reported TSS calculation, but my guess it was also an oversight in filling out a 0.0 in the boxes.*"

As previously reported in the 2011 DEQ inspection, "*On December 16, 2011 IDEQ spoke with Carla Fromm (EPA) and confirmed that the use of the < 2.0 mg/L for concentration was correct; but that its use for the load was not appropriate. She recalls there being some confusion in 2007-2008 on how the industry would report the < 2.0 mg/L because they were afraid of being perceived as not polluting when in fact there were pollutant discharges but at levels below permit limits. She explained then that the < 2.0 mg/L could be used for the Influent, Effluent and Net concentrations; but not for the Load.*" Although there were no apparent violations of the TSS Net values for concentration or load, it may be prudent for IDEQ and EPA to provide some training for the entire industry that clears up the confusion as to how Net values should be calculated.

5. TP Net Load Calculations. IDEQ did a summary analysis of the 2007 through 2015 DMRs of the TP Net Concentration and the TP Net Load to confirm the calculations reported. The TP Net Concentration in 39 DMRs had 38 reported correctly (100% in IDEQ calculation versus the DMR calculation); and only 1 was reported less than 100% (i.e. 98.5% for March 2012; or 0.034 in the DMRs and 0.033 by IDEQ). IDEQ considers this in insignificant difference in the net calculations in the DMR.

   For the Net TP Load the number of DMRs reported was 39. A comparison between the IDEQ calculation and the DMR calculation showed a range of 98.5% to 102.3%; or an average of 100.1%. IDEQ doesn't consider this range to be of significant concern, since the overall average is 100.1%.

6. Water Right Flows versus DMR Effluent Flow Reporting. IDEQ conducted a review of the DMR reported effluent flow from the facility and compared this to their water right flow (IDWR No. 37-2704) of 120.00 cfs, which the facility receives from 2007 to 2015. Of 93 reported values in 93 DMRs, the minimum flow was zero cfs; the maximum flow was 130.63 cfs; and the mean was 75.97 cfs. The variance between the water right (120 cfs) and the actual reported effluent discharge indicates a range from a minimum of -10.63 cfs to a maximum of 120.00 cfs. The -10.63 cfs is based on an overage of 130.63 cfs as the maximum flow in April 2011; or 120.00 cfs – 130.63 cfs = -10.63 cfs. The mean variance is 44.03 cfs. This indicates that the facility is not receiving its full water right of 120.00 cfs. The only time it has received its full water right (or more) was in March 2007, March & April 2008, March & April 2009, March & April 2010, April & May 2011 (-10.63 cfs and 0.65 cfs), March & April 2012, March & April 2013, and March & April 2014; or a total of 15 times in 93 DMR events (or a total of 16.1% of the time). The rest of the time (or 83.9%) the facility receives less than its full water right.

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Mr. Chapman explained that the facility is NOT getting their full water right flow. As explained in 2011, the loss in water is shared amongst the four users: (1) Niagara Springs Fish Hatchery, (2) Rim View Trout Farm, (3) the Pugmire State Park and (4) Niagara Springs Wildlife Management Area. Mr. Chapman also explained that the water loss to the facility has not created a loss in fish production, at least none that he has been able to document. Additionally, the facility entered into the Niagara Springs Agreement (2004) that was established by IDWR. As a result of that agreement, Mr. Chapman said that the facility lost approximately 12 cfs; and Rim View Trout Company gained about 8-10 cfs. Mr. Chapman stated that this agreement essentially caused the facility to give up all of their water rights during those times when the water loss is greatest.

Exhibit B. Niagara Springs Hatchery Chemical Log Sheet 2014

Mr. Chapman produced the following Chemical Log Sheet for the year 2014.

Niagara Springs Hatchery Chemical Log Sheet 2014

Facility Name: Niagara Springs Hatchery NPDES Permit Number: IDG130013

Date	Raceway Treated	Chemical Name[1]	Active Ingredient	Amount of Chemical Applied	Units	Duration of Treatment	Treatment Type[2]	Flow Treated (cfs)	Total Effluent Flow (cfs)	Effluent Concentration[3]	Initials
1/28/14	1 -19	salt	same	1,900	lbs	60 min	flush	100 cfs	100 cfs	84.6 ppm	BLT
5/11/14	3 tankers	Sodium Thiosulfate	same	150	lbs	4 hrs	Neutralize chlorine	NA	NA	Not Discharged	BLT
5/5 - 5/20/14	Eyed egg disinfection	Ovadine	iodine	2,280	mls	60 min	flush	5 gpm	20 cfs	0.11 ppm	BLT
5/11/14	3 tankers	Sodium Hypochlorite	65% Chlorine	36	lbs	4 hrs	bath	NA	NA	Not Discharged	BLT
5/5 – 8/11/14	Foot bath incubation room	Vircon Aquatic	Potassium Peroxymonosulfate, Sulfamic acid,Sodium Chloride	1870	gram	< 1 min	Disinfection of foot traffic	NA	NA	Not Discharged	BLT
6/17-6/27/14	Vat 8 &12	Oxytetracycline	Oxytetracycline	12	Gram	10 day	Feed	0.316	12	0.00001 ppm	BLT
8/10/14	Marking Units	MS 222	Tricaine methane sulfonate		gram	<5 min/fish 50 hrs total	Bath	NA	NA	Not Discharged	BLT
8/25/14	Rcwy1	Furogen Dip	same	12,000	mls	4 hrs	bath	NA	50	0.49 ppm	BLT
9/9 – 9/19/14	1,3-19	Oxytetracycline	Oxyteracycline	14,000	Gram	10 day	Feed	49	50	0.011	BLT
Raceways 1,4,5,7,10,12,14,15,17 & 19 were vaccinated with Furogen Dip at same treatment levels and flows											
11/4-11/14/14	Rcwy 2	Aquaflor	Florfenical	1,000	Gram per ton	10 day	Feed	3.7	70	0.0010 ppm	BLT
Not used in 2014	NA	Acid AB-73	Hydroflouric Acid Sulfuric Acid	0	ml	< 5 min	Cleaning Water sampling equipment	NA	NA	Not Discharged	BLT

[1]Both a copy of the label with application requirements and Material Safety Data Sheet (MSDS) must be kept in your records.
[2]Treatment type means, for example, static or flush bath, injection, or feed.
[3]Effluent concentration is for active ingredient except for formalin, which is considered 100% active.

Exhibit C. Digital Log of the Compliance Inspection Site Visit.

Name of Facility: Niagara Springs Hatchery, IDG-130013
Photographer: Michael Brown, IDEQ-TFRO
Inspection Date: 3/9/2015
Purpose of Inspection: Compliance Inspection for Clean Water Act standards.

Waypoints were not taken during the inspection. Rather, the Garmin Legend HCX model instrument was used to take the latitude and longitude and recorded on an 8 ½" x 11" paper pad by Michael Brown.

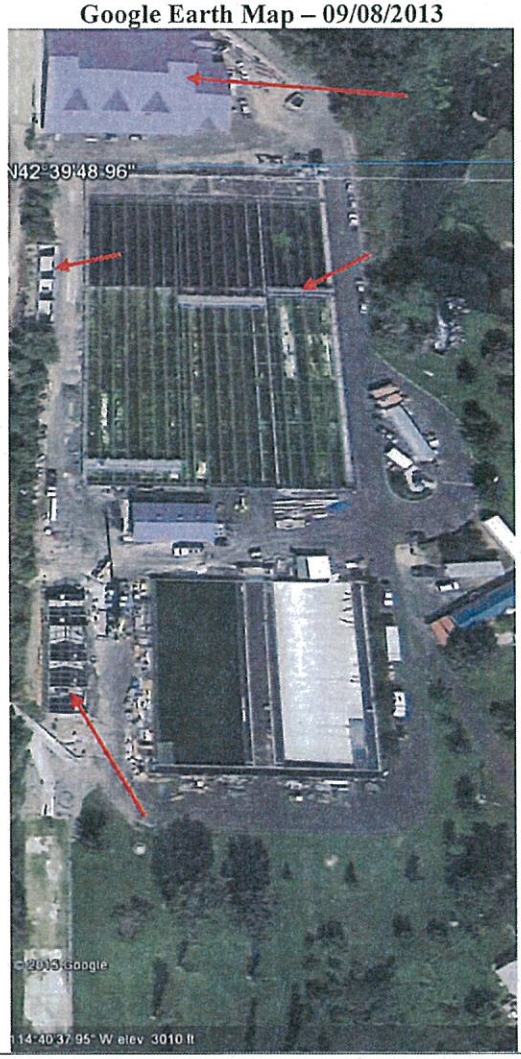
Waypoint	Latitude N	Longitude W	Site Location - Comments	Digital Photos
Not Applicable	42.66439	114.67626	Front Gate	P1010001.JPG
Not Applicable	42.66484	114.67472	Niagara Springs Source	P1010002.JPG
Not Applicable	42.66439	114.67529	Intake for hatchery	P1010003.JPG
Not Applicable	42.66408	114.67561	Filter #1 (northernmost) inside filter building	P1010004.JPG
Not Applicable	42.6641	114.67558	Filter #2 (southernmost) inside filter building	P1010005.JPG
Not Applicable	42.66393	114.67519	Influent traveling screen	P1010006.JPG
Not Applicable	42.66393	114.67519	Influent traveling screen	P1010007.JPG
Not Applicable	42.66371	114.67529	Splitter box	P1010008.JPG
Not Applicable	42.664	114.67559	UV room	P1010009.JPG
Not Applicable	Inside Filter Building	Inside Filter Building	UV Unit #3	P1010010.JPG
Not Applicable	Inside Hatch Building	Inside Hatch Building	Hatch House	P1010011.JPG
Not Applicable	42.66348	114.67576	Raceway #5 Head	P1010012.JPG
Not Applicable	42.66341	114.67581	Fish in Raceway #5	P1010013.JPG
Not Applicable	42.66307	114.67606	Fuel Tank	P1010014.JPG
Not Applicable	42.66307	114.67606	Fuel Tank	P1010015.JPG
Not Applicable	42.66266	114.67583	Raceway #5 Tail	P1010016.JPG
Not Applicable	Inside Chiller Building	Inside Chiller Building	Inside Chiller Building	P1010017.JPG
Not Applicable	Inside Chiller Building	Inside Chiller Building	Chiller	P1010018.JPG
Not Applicable	42.66268	114.67554	Feeding fish	P1010019.JPG
Not Applicable	42.66246	114.6756	West on-line settling pond	P1010020.JPG
Not Applicable	42.66246	114.67554	East on-line settling pond	P1010021.JPG
Not Applicable	42.66199	114.67596	Off-line settling pond	P1010022.JPG
Not Applicable	42.66217	114.67624	Rim View Diversion	P1010023.JPG
Not Applicable	42.66319	114.67483	Outfall	P1010024.JPG
Not Applicable	42.66319	114.67483	Outfall	P1010025.JPG

Exhibit D. Summary of Structural Changes to the Facility as part of an Idaho Code 39-118 Review for a facility renovation (March 12, 2012 through Fall 2013)

The following Google Earth map comparisons show some (not all) of the structural changes (red arrows) on the facility between September 21, 2011 and September 08, 2013. Construction equipment is noted in the 2013 map. The overall footprint of the facility building went from an approximately 2,000 square foot building to a 20,000 square foot building.

Google Earth Map – 09/21/2011

Google Earth Map – 09/08/2013



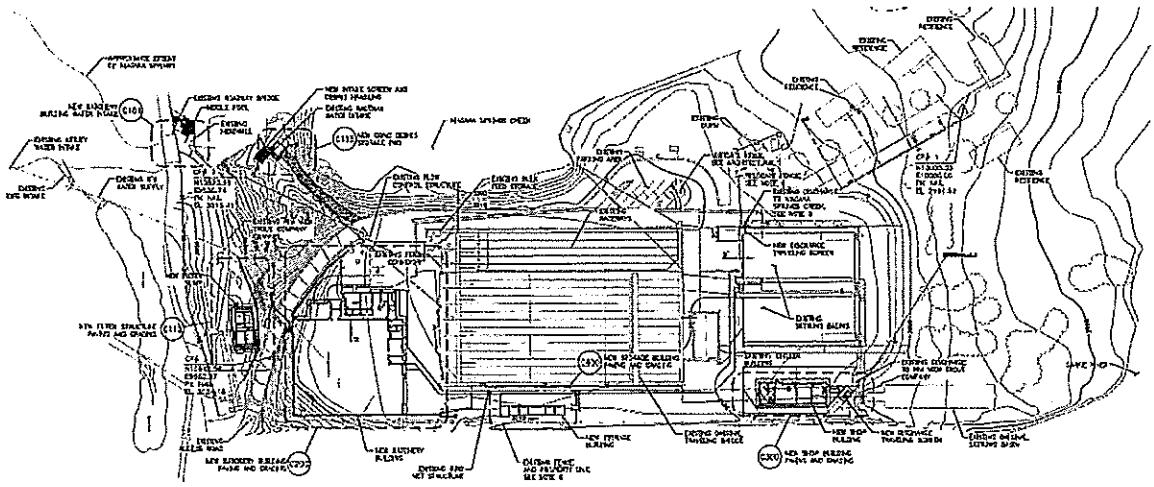
The red arrows indicate the following: (1) New Main Office and Hatchery Building; (2) New Fuel Area for vehicles; (3) New Traveling Screens across the Outside Raceways for feeding; and (4) and a new Storage Building on the west side of the Outside Raceways. Other improvements are not

highlighted in the Google Earth figure.

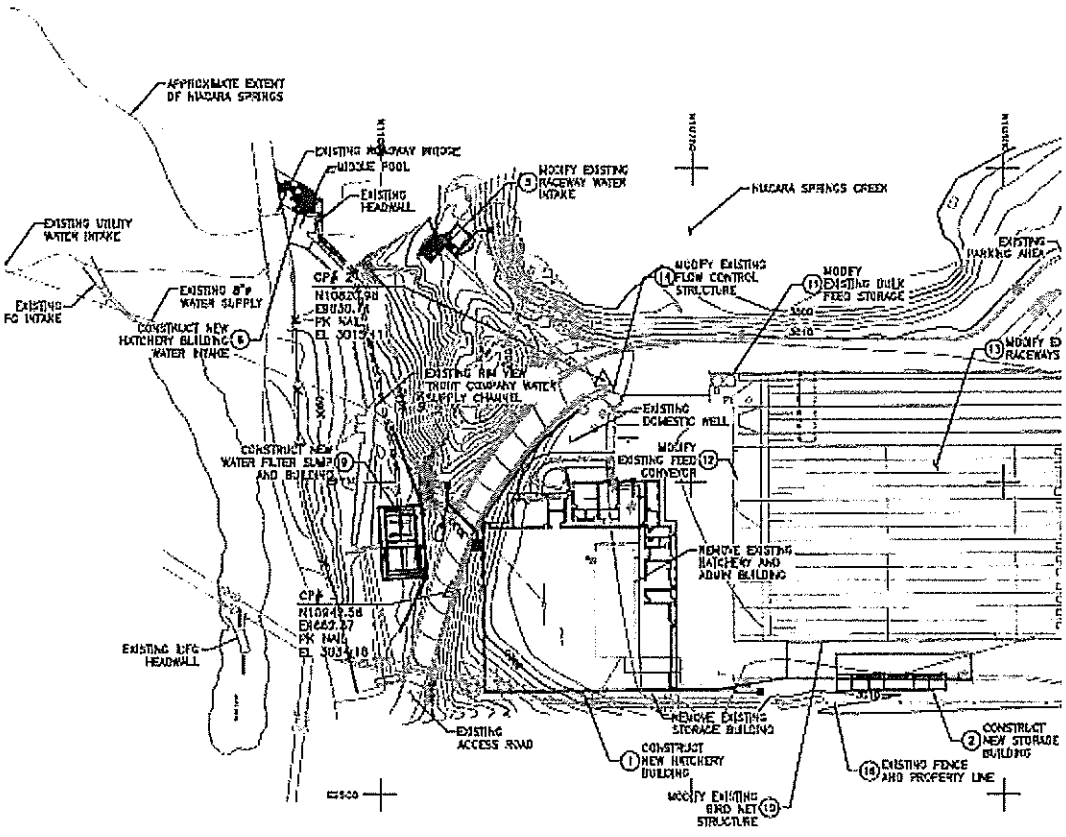
IDEQ visited with Jerry Chapman during the fish farm inspection and went over the plans and specifications (2 page cover letter + 236 pages of plans) submitted on January 09, 2012 (IDEQ received on January 10, 2012).

The following questions were asked (as related to the facility's plans and specifications associated with the Idaho Code 39-118 Review process) with the responses from Mr. Chapman. Most of the following components were confirmed during the site tour of the facility to compare the former facility to the current upgraded version. The primary upgrades dealt with: (1) Upgrading the diversion from the Niagara Springs source to the Hatchery Building via a Filter Building (with a new Filter Sump & Building) and Pressurized UV (in the Hatchery Building) for suppression of potential biological pathogens-of-concern (IHN, IPN, FR, ERM, VHS, WD, CWD and NU); (2) Upgrading the diversion from the Niagara Springs source to the Outside Raceway through the Splitter Box (or Flow Control Structure); (3) Upgrading the existing Bulk Feed Storage; (4) Construct a new Hatchery Building with the water source coming from the Filter Building and UV biological suppression area; (5) Modify the existing Outside Raceways by removing and replacing the cement walls on every other raceway; (6) Replace the existing Traveling Screen with 3 Traveling Screens for better feeding management; (7) Construct a new Storage Building; (8) Modify the existing Bird Net Structure; (9) Installation of a new Traveling Screen in the discharge area to Niagara Springs Creek; (10) Construct a new Shop Building; (11) Installation of a new Traveling Screen in the diversion channel to the Rim View Hatchery.

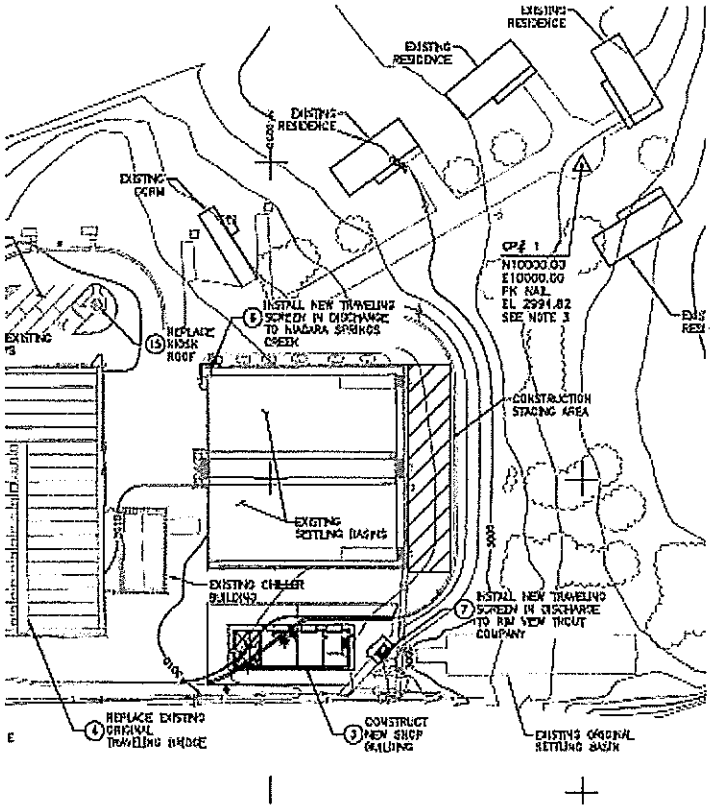
1. Page 7 & 25 of the General Layout. Yes, there have been some structural changes to the general layout of the facility. The following figure (from page 25 of the plans) shows some of the main changes that occurred. It represents the Overall Site Plan for the facility.



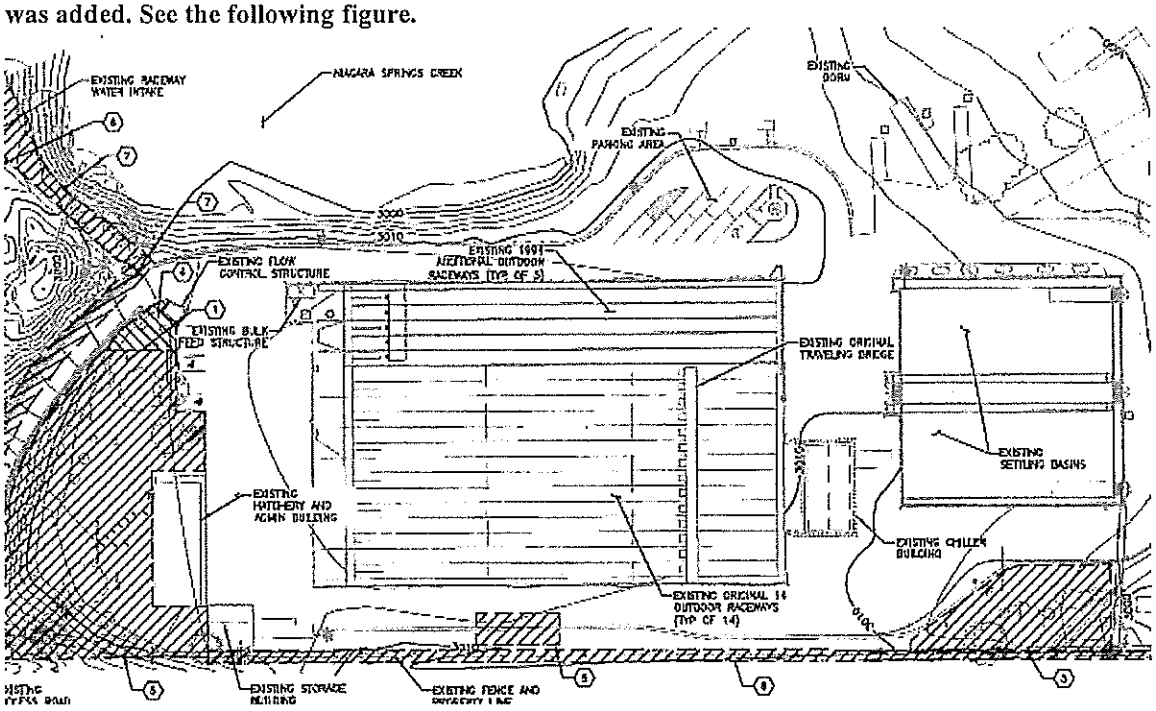
This general layout is broken up into two parts as shown in the following two figures. The first figure is of the approximate north half (cutting through two-thirds of the Outside Raceways).



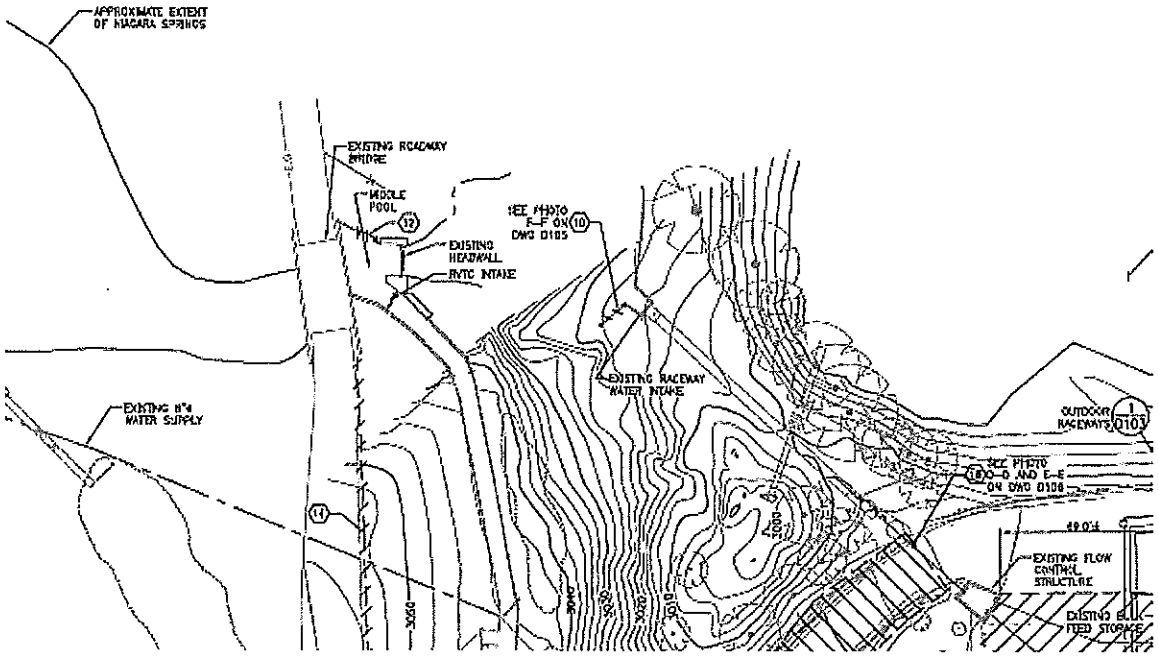
The following figures is of the south half (or the bottom third of the Outside Raceways).



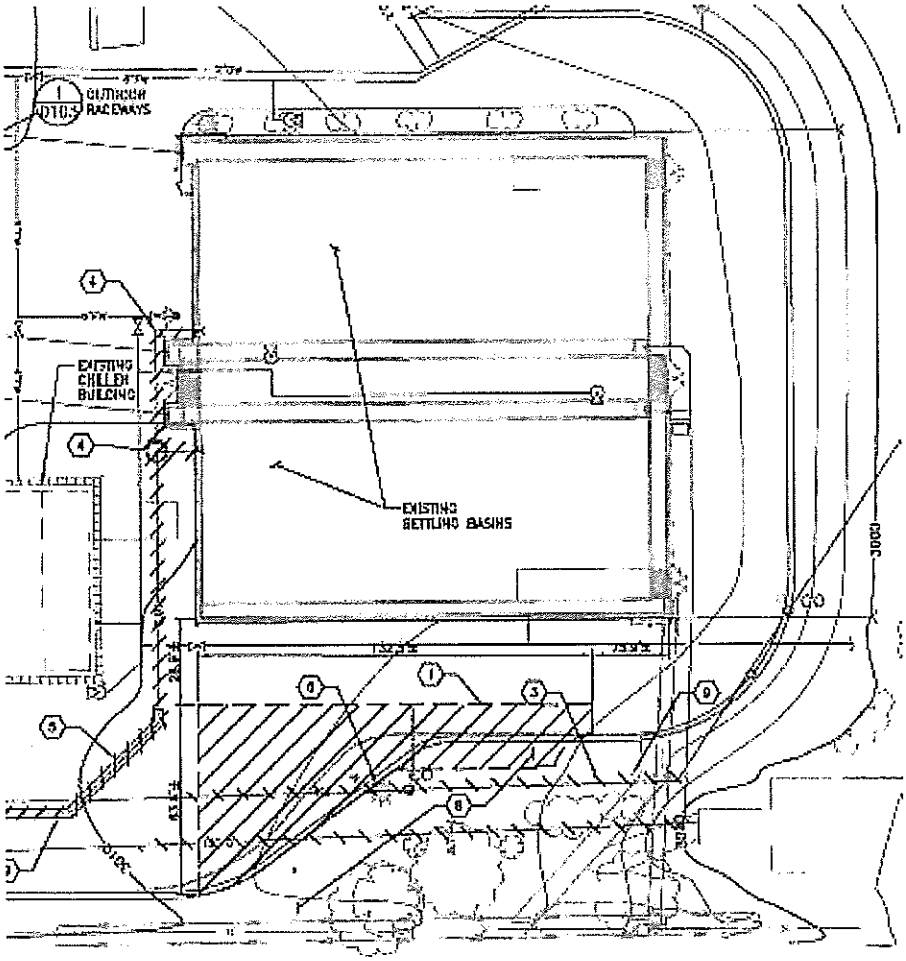
2. Page 9 – Existing and Additional Outdoor Raceways. New concrete walls were added on every other raceway. Additional key ways were added for dam boards. And, new bird netting was added. See the following figure.



3. Page 10 – Existing Raceway Water Intake & Existing Flow Control Structure. New Intake Box at lower pool with Traveling Screens. Other intake at Hatchery Building off of the Rim View Canal.



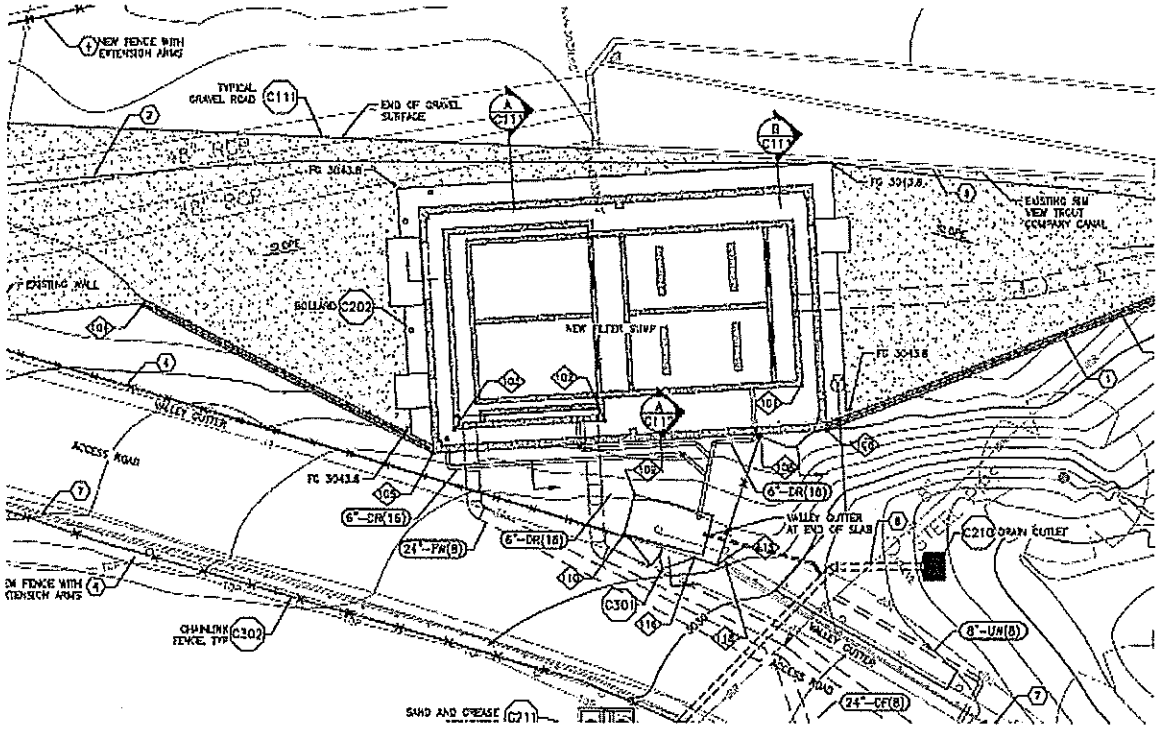
4. Page 11 – Existing Settling Basins. Pipe goes to middle (below the pathway between the two FFSBs with an outflow to the East and West FFSBs.



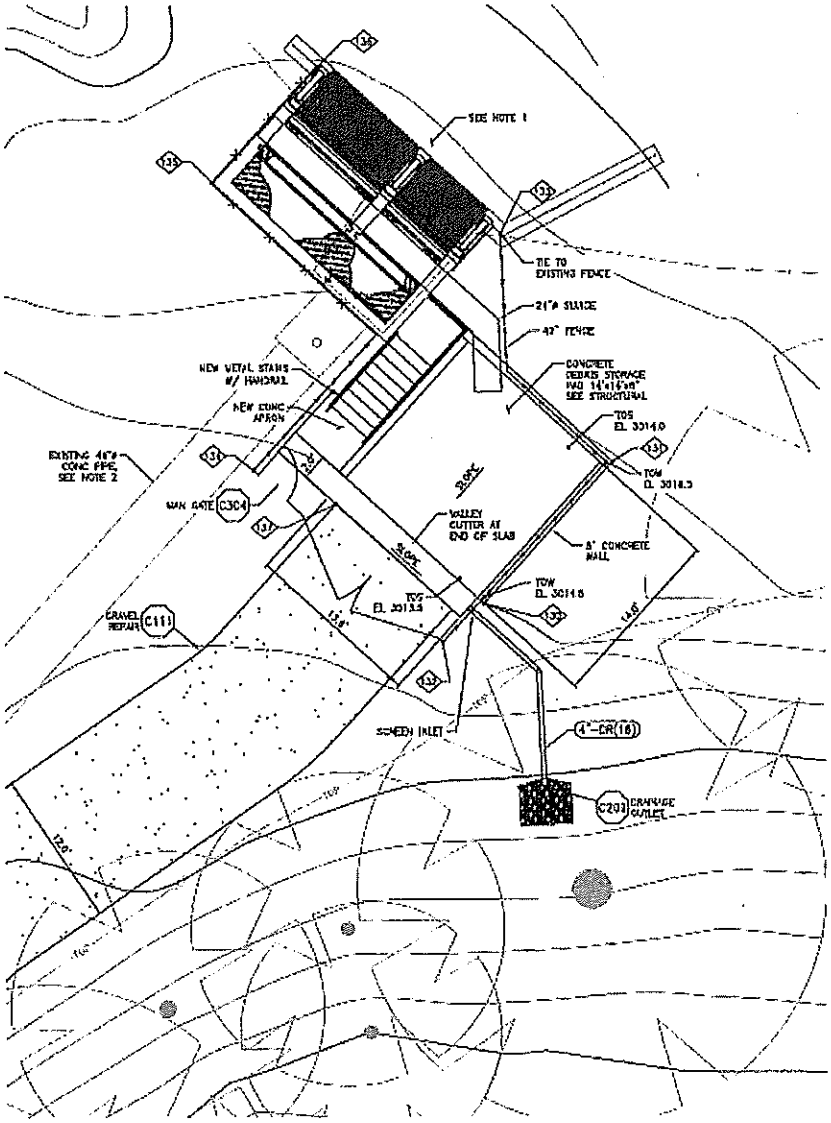
5. Page 12 – Original Raceways and 1994 Raceways. No major changes except to do patchwork.

6. Page 17 – Erosion & Sediment Control. Contractor installed erosion and sediment control measures as described in the plans. All activity was stable and no erosion occurred into Niagara Springs Creek or the Snake River. All slopes were protected from erosion during rough grading operations; and groundcover was added thereafter. All slope protection swales were constructed at the same time as banks were graded.

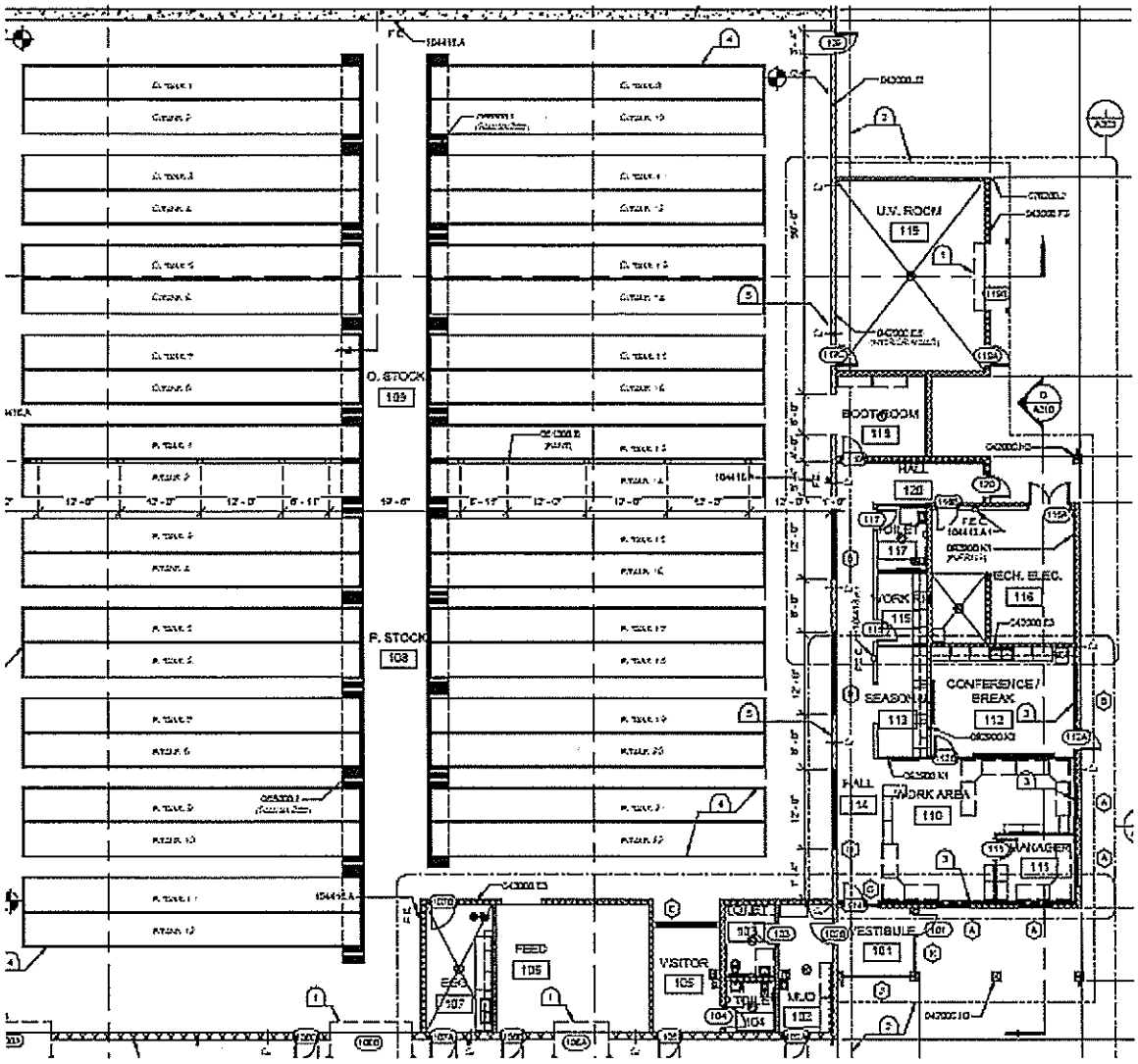
7. Page 27 – New Filter Sump for Filter Building. For Filter Building for wash water collection.



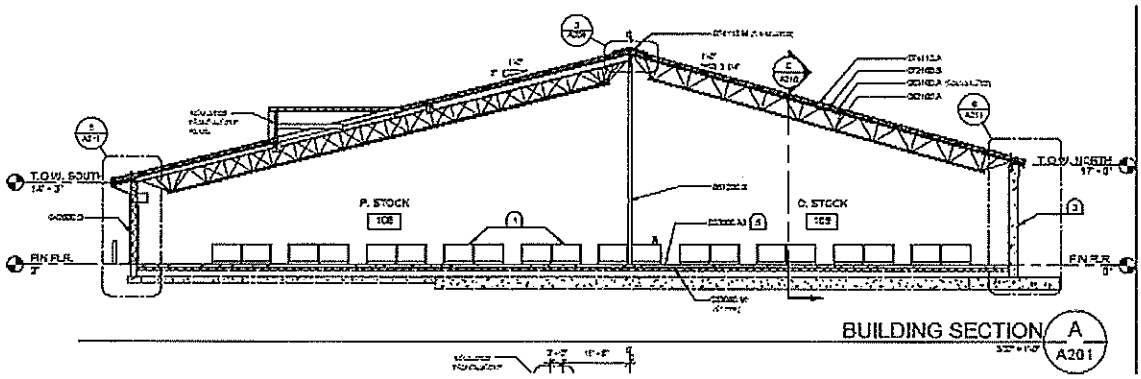
8. Page 30 - Concrete Debris Storage Pad. Part of construction for trucks.



9. Page 31 – Hatchery Building. Brand new building. 76 incubators; 38 fifty foot vats. The 38 vats are section off into two groups: (1) Tanks 1-16 and (2) Tanks 1-22.



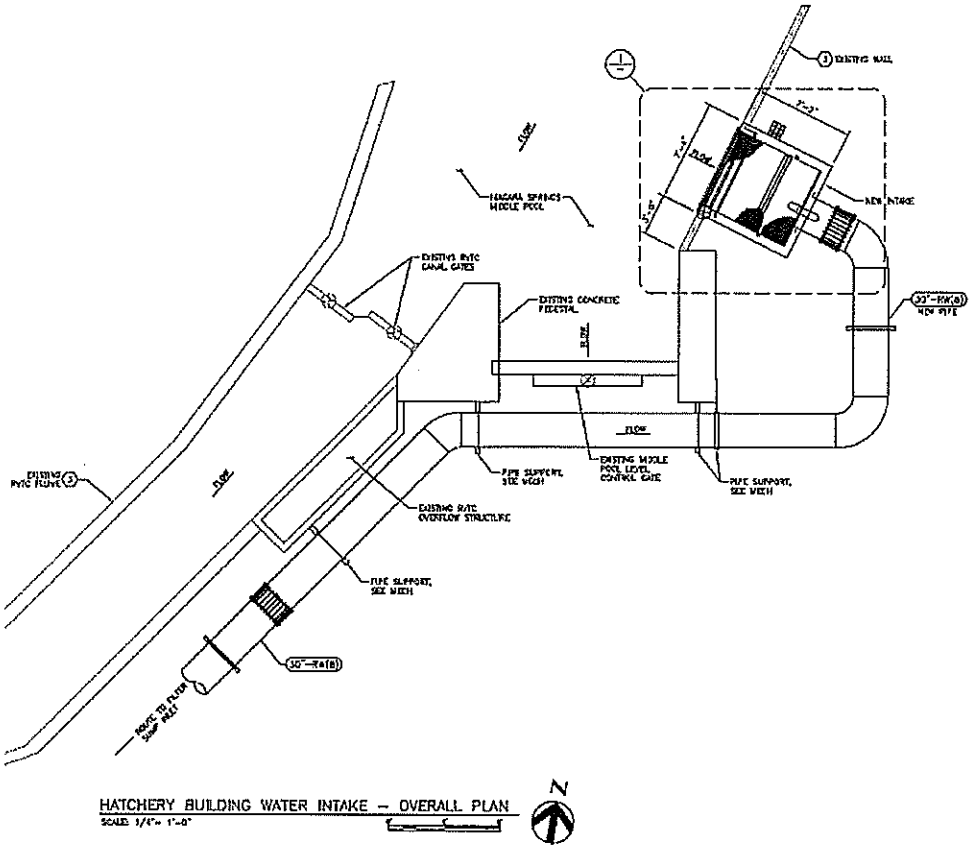
The following figure is a cross-sectional view of the Hatchery Building (Page 49 of the plans).



10. Page 42 – UV Room. Three (3) UV units to treat 9 cfs in relationship to the Hatchery Building. See figure in item 9 above and note the location of the UV Room in relationship to the inside raceways (or vats).

11. Page 55 – Toilet Waste. New toilet and new septic system.

12. Page 87 – Hatchery Building Water Intake & Outtake. **Changes were done in the intake from the Rim View Canal. Reconfigured the outlet line to the FFSB.**



13. Page 119 – Hatchery Building Roof – Valley Gutter Discharge. **An outside canal was constructed to connect to the FFSBs; thus taking any stormwater for tertiary treatment at the FFSB.**

Exhibit E. Stick Diagram of Flow Layout for the Niagara Springs Steelhead Hatchery – developed by IDEQ-TFRO

The follow stick diagram shows the hydrology of the facility post-construction upgrade. On March 23, 2015 IDEQ-TFRO (Buhidar) sent an email to Jerry Chapman for his input as to the accuracy of the stick diagram. Mr. Chapman responded on March 24, 2015 and stated: "*Yes, this diagram is fantastic. Great job. My only comment is that keep in mind there isn't a concrete wall in our headbox between raceway 14 and 15, so the two pipes coming from the splitter box can both supply all 19 raceways. In general though, the east pipe supplies 15-19 and the west pipe supplies 1-14 as you stated. Again, great job. Thanks. Jerry.*"

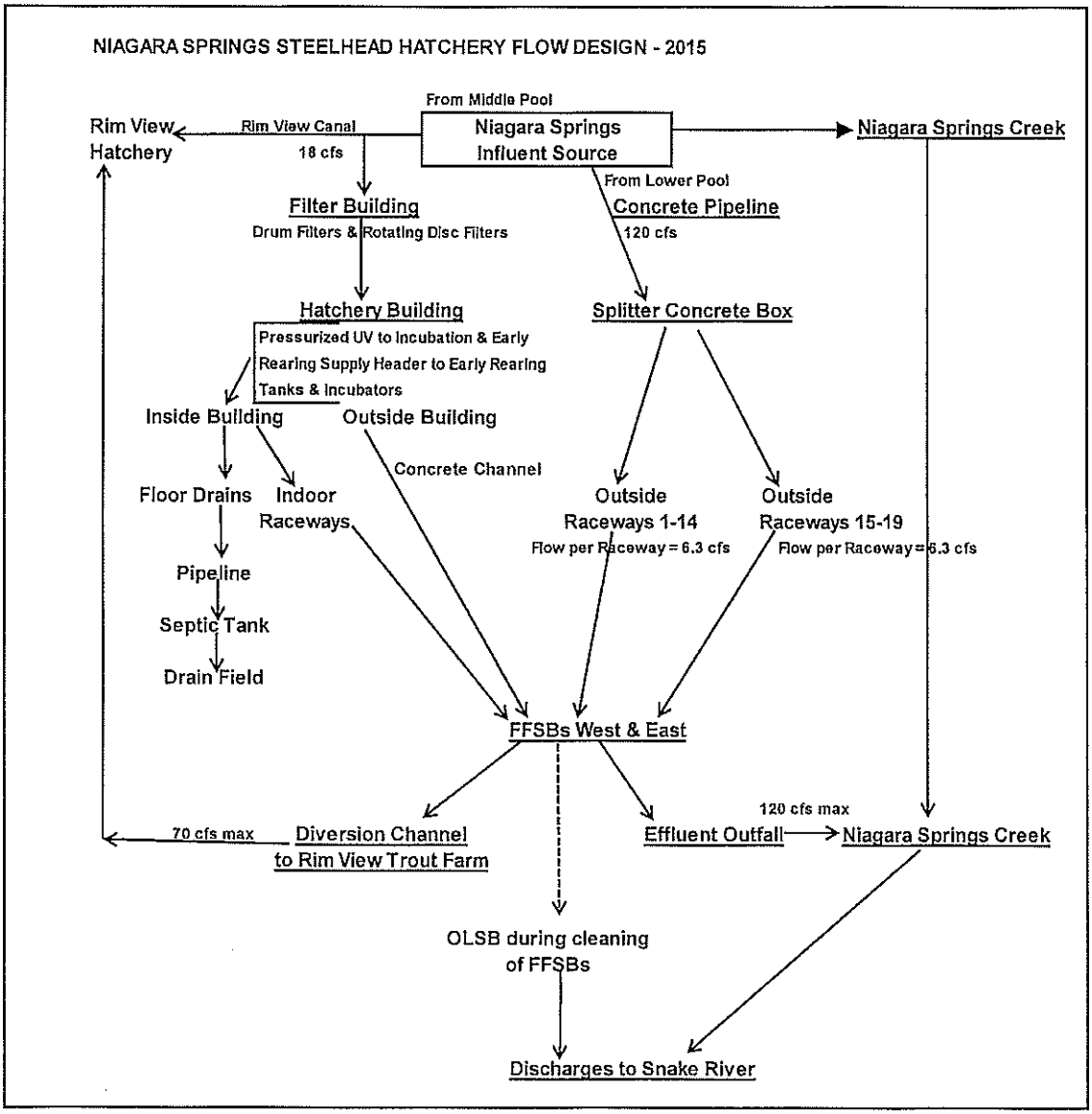


Exhibit C. Digital Log of the Compliance Inspection Site Visit

Name of Facility: Niagara Springs Hatchery, IDG-130013
Photographer: Michael Brown, IDEQ-TFRO
Inspection Date: 3/9/2015
Purpose of Inspection: Compliance Inspection for Clean Water Act standards.

Table of Photographs

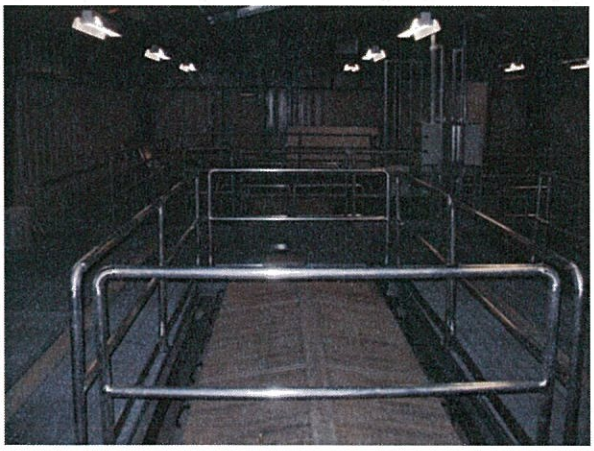
Photo # & JPG	Latitude N	Longitude W	Direction	Description
#1 P1010001.JPG	42.66439	114.67626	S	Front Entrance
#2 P1010002.JPG	42.66484	114.67472	N	Niagara Springs Source Water
#3 P1010003.JPG	42.66439	114.67529	SW	Intake for Hatchery Building
#4 P1010004.JPG	42.66408	114.67561	W	Filter #1 (northernmost) inside Filter Building
#5 P1010005.JPG	42.6641	114.67558	W	Filter #2 (southernmost) inside Filter Building
#6 P1010006.JPG	42.66393	114.67519	NE	Influent Traveling Screen
#7 P1010007.JPG	42.66393	114.67519	NE	Influent Traveling Screen
#8 P1010008.JPG	42.66371	114.67529	N	Splitter Box
#9 P1010009.JPG	42.664	114.67559	NW	UV room in Hatchery Building
#10 P1010010.JPG	Inside building	Inside building	W	UV Unit #3
#11 P1010011.JPG	Inside building	Inside building	W	Vats inside Hatchery Building
#12 P1010012.JPG	42.66348	114.67576	S	Raceway #5 Headrace
#13 P1010013.JPG	42.66341	114.67581	S	Steelhead in Raceway #5
#14 P1010014.JPG	42.66307	114.67606	W	Fuel Tank Area
#15 P1010015.JPG	42.66307	114.67606	W	Fuel Tank Area
#16 P1010016.JPG	42.66266	114.67583	N	Raceway #5 Tailrace
#17 P1010017.JPG	Inside building	Inside building	E	Inside Chiller Building - Chemical Storage
#18 P1010018.JPG	Inside building	Inside building	S	Chiller Mechanism
#19 P1010019.JPG	42.66268	114.67554	NE	Traveling Screen for Feeding fish
#20 P1010020.JPG	42.66246	114.6756	S	West on-line Settling Pond
#21 P1010021.JPG	42.66246	114.67554	S	East on-line Settling Pond
#22 P1010022.JPG	42.66199	114.67596	S	Offline Settling Pond
#23 P1010023.JPG	42.66217	114.67624	NW	Rim View Diversion Canal
#24 P1010024.JPG	42.66319	114.67483	S	Outfall to Niagara Springs Creek
#25 P1010025.JPG	42.66319	114.67483	S	Outfall to Niagara Springs Creek

Photograph 1 – Front Gate

Photograph 2 – Niagara Springs Source Water

Photograph 3 – Intake for Hatchery Building

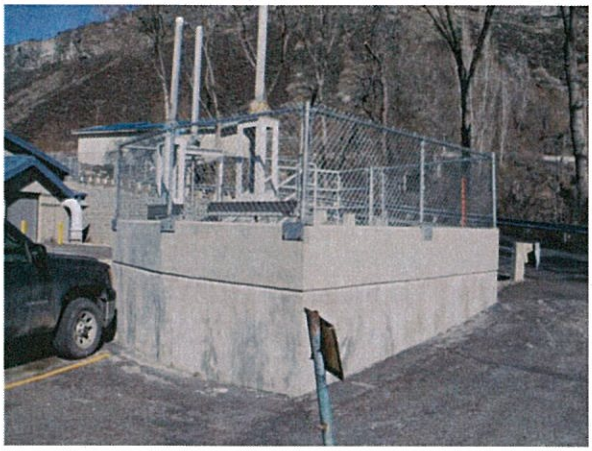
Photograph 4 – Filter #1 – northernmost in Filter Building



Photograph 5 – Filter #2 – southernmost in Filter Building

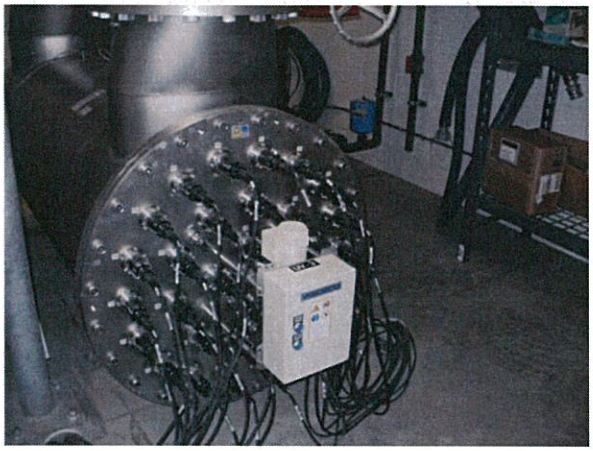
Photograph 6 – Influent Traveling Screen

Photograph 7 – Influent Traveling Screen

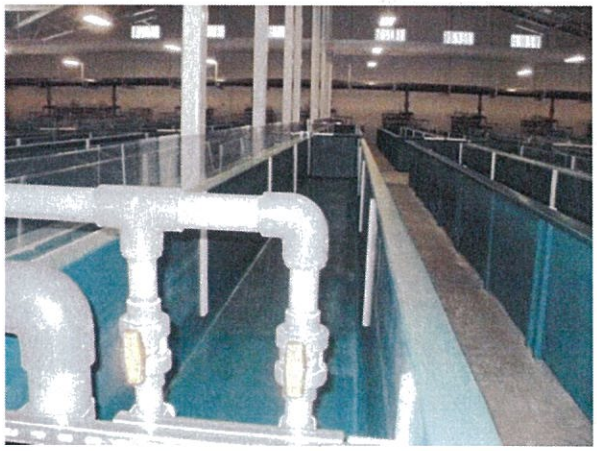


Photograph 8 – Splitter Box

Photograph 9 – UV Room in Hatchery Buidling



Photograph 10 – UV Unit #3 in Hatchery Building



Photograph 11 – Vats inside Hatchery Building

Photograph 12 – Raceway #5 Headrace

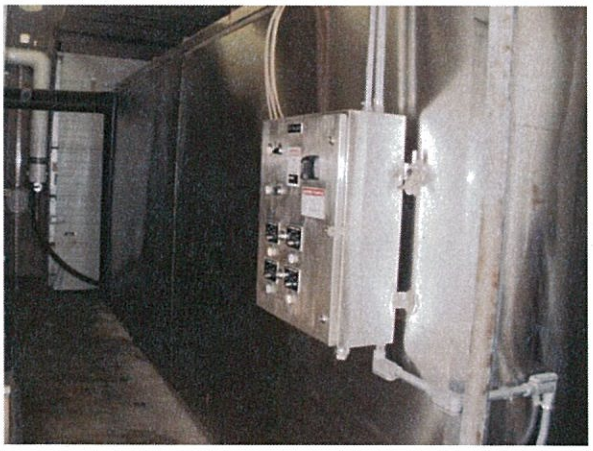
Photograph 13 – Steelhead in Raceway #5

Photograph 14 – Fuel Tank Area

Photograph 15 – Fuel Tank Area

Photograph 16 – Raceway #5 Tailrace

Photograph 17 – Inside Chiller Building – Chemical Storage



Photograph 18 – Chiller Mechanism

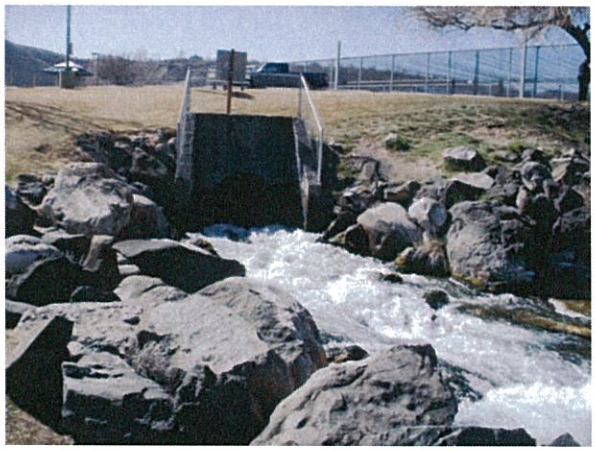
Photograph 19 – Traveling Screen for Feeding Fish

Photograph 20 – West on-line Settling Pond

Photograph 21 – East on-line Settling Pond

Photograph 22 – Offline Settling Pond

Photograph 23 – Rim View Diversion Canal



Photograph 24 – Outfall to Niagara Springs Creek

Photograph 25 – Outfall to Niagara Springs Creek